



The 21st century HUNTING RIFLE

Voere's new LBW-M is a marksman's rifle designed to meet the most strenuous demands of military sniping. This big, high-precision rifle based on the LBW action is available in sporting guise.



TWO HUNDRED YARDS down range, the target seemed to wriggle a little through the heat mirage. I thought the group I'd just fired with Lapua Match ammo should be good, since the view through the big Sightron variable set at 24x was clear and crisp. The ragged cluster of bullet holes looked fine, but it wasn't until I rolled over and looked through the spotting scope that I could determine the five rounds had landed in just a shade over one MoA. Altogether, three groups fired at 200 yards went into 1.10, 1.149, 1.163 and 1.186 for an average 1.160, indicating that the Voere is close to being an honest 1/2-minute performer. Well, I was certainly impressed.

The Voere LBW-M was designed to be a sniper's rifle right from the start. Some rifles that purport to be "sniper specific" designs, such as the Kimber 8400 Patrol and Steyr SSG, are simply accurized versions of existing models. In contrast every component of the Voere LBW-M was designed from the outset for one purpose only - to raise the standard of long range sniping to a new and higher level.

During a recent visit to Austria I talked with several rifle manufacturers each of whom had developed a special bolt-action Tactical rifle. Each company indicated their gun was undergoing testing by various European military and law enforcement agencies from whom they hoped to land

lucrative contracts. Mark Herron and I spent a day at the Voere Prazisionstchnik GmbH factory in Kufstein where Sven.M.Ruhland, the company's CEO showed us the company's line of sporting rifles as well as the LBW-M Tactical military/civilian rifle with modular integrated system. Unconventional is a good description of both the appearance and performance of this precision Austrian bolt gun.

The LBW-M is an impressive looking black gun based on the Model LBW Voere action. Instead of being simply an accurized version of an existing model the Voere is a "sniper-specific" design, and every component was designed from the outset for one purpose only - to culminate in a production rifle that would raise the standard of long range performance to its highest level. Following the current trend in European firearms, the LBW offers a barrel and calibre changing system which Voere has adapted for tactical use. Competition is fierce and many top modern riflemakers are competing for the prize. Voere's CEO told us that the LBW-M has just been adopted by the German Police Sniper section.

Big action bolt guns chambered for the .338 Lapua Magnum and .50BMG have proved their worth in Afghanistan where topography of both desert and mountainous terrain have reintroduced long- range

combat. NATO troops need rifles to effectively engage targets at from 400 to 1000 metres and beyond. American snipers have claimed hits on Taliban fighters at extreme distances out to 2000 yards.

The LBW-M is designed to meet military specs with a black synthetic stock, aluminium and steel construction and a no-nonsense non-reflective finish. The triple-lug, one-diameter bolt is housed in a massive alloy receiver and the unique two-position cocking-decocking system is housed in the shroud. The rifle is cocked in the normal way on the uplift of the bolt handle, but the safety is engaged by pushing forward on the rear end of the bolt and at the same time rocking back the lever on the left rear side of the receiver. This releases the sear and decocks the firing pin. When the rifle is decocked the cocking piece projects from the shroud far enough to expose a white dot signifying that the rifle is "Safe." Simply pushing the cocking piece forward with the ball of the thumb re-engages the sear, cocks the firing pin and readies the rifle for firing. This unique safety mode blocks any trigger movement by interposing a tab through the receiver wall and into a notch in the bolt body just ahead of the handle. A bolt lock engages when the rifle is loaded and uncocked.

The LBW-M features a Weaver-style Picatinny rail on the

ABOVE: The rifle was put through its paces with match-grade ammunition from Lapua and RWS.

INSET: A full-length shot of the LBW-M.

OPPOSITE PAGE, TOP: The Voere LBW-M tactical rifle has been adopted by the German Police as their official sniping rifle.

Test Report



TOP LEFT: Barrel threaded for suppressor at front of muzzle break.

CENTRE: Cocking piece projects enough from shroud to show white dot when safe. Pushing it forward re-engages sear and cocks striker.

TOP RIGHT: Triple-lug bolt heads quickly and easily exchange by simply pulling out a retaining pin.

ABOVE: When a tactical rifle shoots groups like this at 200 yards, it's something special.

hexagonal receiver and there's another monolithic rail system set atop the three large brackets which secure the forearm to the barrel. It is designed to offer a seamless transition for the scope from the top rail of the receiver, forward toward the muzzle. Two additional rails on the right and left side of the barrel, held to either side of the three brackets with six hex-head screws are for accessory attachment. The side rails afford unlimited space for optics, lights, lasers, Q/D swivel points and a host of other accessories.

While the cosmetics of the LBW-M clearly reflects its military purpose, the civilian version is presented as a lightweight dedicated hunting arm with a choice of suitable calibres, and is available without the cage and brake. Its modular construction allows you to interchange barrels to suit it for a variety of hunting situations and different size game. For example, a varmint cartridge in the .223 Rem., a target cartridge in the 6x47 Lapua, and two big game cartridges - the .308 Win. and .300 Win. Mag; the .338 Lapua Magnum is a long range sniping round much favoured by the military but with only limited application for sporting use.

The LBW-M uses match-grade barrels, chambers and triggers. Replacement barrels come from the factory fully headspaced and ready to install. The rifle's heavy-contour 720mm barrel is fluted to reduce weight, increase rigidity and speed up cooling. The barrel measures 29mm near the action, then commences a straight taper to reach 25mm just behind the muzzle brake. The muzzle has an adaptor to take a suppressor. The LBW-M can be fitted with ramped back-up sight and emergency front sight in the event the

scope gets put out of commission. Barrels are available in carbon steel, special steel and stainless.

The LBW-M is available in five different calibres - .223 Rem. with 1:9 twist; 6.5x47 Lapua, 1:8 twist; .308 Win., 1:12 twist; .300 Win. Mag., 1:10 twist. The .308 Lapua Magnum has a 1:10 to 1:10 progressive twist. By changing barrel and calibre within a calibre group all calibres up to .338 can be adopted.

The interchangeable barrel system effects changeover by loosening two large hex-head retaining screws in the left front side of the receiver which pinch the split receiver tightly around the unthreaded barrel shank. The barrel has an indexing slot.

Exchange barrels may require a change of bolt heads as well as magazines. The bolt is easy to remove and disassemble. First, decock it, then hold the safety lever down and turn the shroud clockwise to release the firing pin assembly and spring from the bolt body; push the large 15mm diameter pin out, lift the bolt head off and replace it with the correct size bolt head. All calibres can be changed with the exception of the .338 Lapua Magnum which requires a complete bolt. Special barrel length and special twists are available on request.

To reinstall the firing pin assembly, slide it back into the bolt body, then put pressure on the cocking piece, at the same time hold the safety lever back and turn the shroud anti-clockwise until the cocking piece clicks home in its cam slot in the bolt body. Take care when inserting a bolt head that the extractor is on the right side or the bolt head won't enter the breech. There's an indexing slant on bolt body and bolt head. The bolt body and manual cocking system are made of alloy; the bolt head, its retaining pin, cocking piece, bolt handle and sleeve are all steel. The bolt body is partially covered with shallow fluting to allow space for any debris - ice, mud or dirt - to accumulate without binding or jamming the bolt in the action.

The bolt is massively proportioned and the alloy body has a diameter of 23mm. The separate bolt head is undercut to a 17.40mm diameter behind and between the trio of non-protruding locking lugs positioned in a symmetrical 120 degree pattern around the counterbored bolt face. This results in a low bolt lift of 68 degrees. The bolt's three lugs are of uniform size - 15.56mm long and 11.25mm wide - and provide great strength. They engage corresponding locking shoulders in the rear end of the barrel. Forming these shoulders in the rear end of the barrel together with the rifling and chamber simplifies heat treatment of the hammer-forged barrel.

Voere fits the barrel for minimum cartridge head protrusion. In the .308 test rifle there was only 0.1270mm (.005") gap between the bolt and breech face. That part of

Test Report



SPECS

Voere LBW-M

Maker: Voere Praisionstehcnik GmbH, Untere Sparchen 56, 6330 Kufsten/Tirol, Austria

Type: bolt action tactical

Calibre: .308 Win. tested

Barrels: carbon steel, stainless and special steel.
Length: .223 51cm, 6.5x47 Lapua, .308 and .300 win. Mag. 65cm ; .338 Lapua Magnum, 69cm.

Trigger: single stage adjustable from 700g to 1300g

Overall length: 102cm to 118cm depending on barrel and stock length

Sights: emergency sights Weaver-style rail provided for scope

Magazine Capacity: 5-rounds (4 in magnum)

Contact: Herron Security & Sport. P.O Box 179 Willoughby, NSW 2068.

PH: (02) 9417 3388
FAX: (02) 9417 3200.



the cartridge head which protrudes from the chamber is encircled by a bolt face counterbore some 3mm deep which is interrupted only by a narrow 5.50mm slot for the small steel extractor pinned inside the lower right locking lug and tensioned by a tiny entrapped coil spring. Its narrow claw grips only about one-tenth of the cartridge rim circumference, but an angled foot at the base of the extractor helps draw it inwards and prevent it slipping as it withdraws a fired case from the chamber.

A plunger-type ejector recessed into the opposite (left) side of the bolt face works in conjunction with the extractor and ejects cases at a 30 degree angle out of the port in the receiver.

Due to limited bolt rotation, extraction and chambering cams in the LBW-M are small. Most low-lift bolts on tri-lug bolts are difficult to raise due to the steep angle of the cocking cam. Voere licked this problem earlier with their LBW sporter by balancing the cocking cam forces about the firing pin axis, so that not only are they balanced radially, but are also shifted forward to the middle of the firing pin.

This thoroughly balanced geometry combined with working parts which are smoothly finished, and precisely fitted, enable the rifle's powerful mainspring to be cocked without excessive bolt-lift effort.

The LBW-M has what the factory calls a "two-piece firing pin" but it's actually a unique design in which a small precision striker piece, barely 25mm long and weighing

TOP LEFT: Detail of fluted heavy barrel.

CENTRE: Easy-to-grasp 5-rd mag in .308 Win.

TOP RIGHT: Adjustable cheekpiece with numbered marks allows repeatability between users.

ABOVE: Ample provision of picatinny rails allows attachment of mission-specific accessories.

about 2.8 grams, literally floats in the bolt head and is struck by a spring-driven firing pin rod. This self-aligning two-piece assembly avoids the internal binding possible with a close-fitting one-piece unit. When changing bolt heads (except the .338 Lapua Magnum), the firing pin tip will be retained in the front of the rod.

The breech tends to entrap and control any escaping gas as it is blocked off at the rear by an enlarged shoulder at the rear end of the bolt head except at the bottom where it is vented down the feed ramp into the magazine well. Gas inside the breech is vented through two ports, one on either side of the receiver ring. Any gas entering the bolt through the firing pin hole is blocked by the head of the firing pin and vented through a pair of holes in the right side of the bolt body. At the rear, the shroud-type bolt sleeve prevents gas from reaching the shooter's face. The bolt turnout of 68 degrees allows enough extra rotation to overlap the cam

Test Report



bevels, and thus centre the actual contacting surfaces for optimum bearing efficiency. The root of the bolt handle turns down into a notch in the receiver body to act as an auxiliary lug.

The large diameter tri-lug bolt effectively limits sideplay and its body is guided by the bolt stop running in a full length longitudinal groove in the bolt body which extends through the bolt handle's collar and sleeve.

The military-style stock, naturally, is skeletonized and fully adjustable for height and length. Turning a screw allows exact high adjustment of the ground spike to gain the correct height for the hand rest. A full M 16 or AR 15 full pistol grip is standard and can be fitted with an adjustable palm rest. The grip improves control by placing the shooting hand at a very natural angle. The cheekpiece is also adjustable for height. The forend is made from an aluminium forging and underside of the forend has a UIT rail and adaptor for a bipod. Accessories for the LBW-M include a folding stock, a scope mount, palm rest and muzzle brake.

Each rifle is accompanied by two 5-shot detachable box magazines. The bottom of the magazine box is alloy and protrudes below the belly of the stock making it easy to grasp. The internal section of the single-column magazine and the follower is pressed steel. The box magazine is retained by a pair of

ABOVE LEFT: Flat, stable base platform on pistol grip serves as rear ground anchor when needed.

CENTRE: Ground spike enables the rear of the rifle to be raised or lowered to steady it in any position where the muzzle needs to be tilted up or down.

ABOVE: Buttplate is adjustable for height and repeatability.

spring-loaded catches, one on each side. Press them in and two strong springs propel the magazine from its well. Being a single column design, cartridges fairly leap off the follower and slide into the chamber smoothly. Magazine capacity is 5 rounds in standard calibres and 4 in the magnums.

My test gun was fitted with a Harris Bipod which attaches to a fitting integral with the forend. The system has five degrees of left and right cant built into the mount, resulting in enough movement so that the rifle can be supported in a level firing position on uneven surfaces. The bipod itself has a tension adjustable ball joint which allows tracking of moving targets without movement of the bipod feet.

All those who fired the LBW-M commented on the smooth operation of the bolt. The three-lug design makes it necessary to lift the bolt handle only 68 degrees to unlock the action. Combining this short movement with buttery smooth travel makes for a very fast cycling bolt gun. Cartridges feed from the magazine with the lightest of resistance during the loading cycle. Then as easily as the bolt opens, it cams closed. It's smooth and quick.

We attached a Sightron SI155 6-24x50mm target scope with mil-dot reticle to this sniper rifle. This is a big scope which features large oversize tactical-style adjustment knobs graduated in 1/4-minute clicks and binocular-type focusing. Parallax adjustment is in a third knob on the left side of the turret. Lenses have a seven layer multi-coating of Sightron's Zact-7 Recoat throughout the entire lens system which provides some of the highest light transmission in the industry. The ExacTrack system ensures a constant zero.

The Sightron is a true long-range tactical scope indexed for mil-dot use at the highest power. The reticle has an adjustment range of 100-minutes of travel for both windage and elevation.

The rifle was tested with two brands of Match Target ammunition - Lapua Super Sniper 7.62x51 shooting 170gn Lock-Base full jacket bullet at 2750fps and RWS .308 with the 190gn Match-5-Bullet at 2460fps. Both loads proved equally as accurate grouping into 0.708, 0.639, 0.829, 0.700 and 0.660 at 100yds for an average 0.707 MoA.

No doubt but that the Voere LBW-M in .308 will be hard to beat for a police bolt-action rifle. It's an easy gun to shoot because it's long and heavy, so that it can be kept trained on the target for an extended period without the slightest tremor. And it's more than accurate enough to get the job done, the designated trigger weight of 1.134kgs is just about right, and I don't know where you could find a more accurate rifle of its type. ■



MOJO Critter

The MOJO Critter predator decoy is light-weight, portable, simple and affordable. It has a highly visible and tantalising action using realistic prey-type fur that immediately attracts and holds predators' attention.



Universal Game Caller

AJ Productions presents their innovative 3-piece electronic sound device: including main hand unit, wireless hand remote & removable sound card

FIVE SOUNDS PER CARD, SOUNDS AVAILABLE:

- Red Deer • Silka Deer • Wild Dog
- Predator Card (fox) • Mallard Duck
- Canadian Geese/Paradise Shelduck
- Fallow/Rusa Deer Combo
- Sambar/Fallow Deer Combo

Sound Cards purchased separately
8-watt amplified speaker also available



C & A OUTDOORS

CAMPING- FISHING- HUNTING OUTDOOR SPECIALIST

Guns, Ammo & Accessories, Large Range of Hunting Clothing, Footwear

Website: www.candao.com.au Email: info@candao.com.au

60 Tramway Rd, Morwell, Vic, 3640 Ph: 03 5134 8038