

Warning-

Always one for a large calibre, long range shooter, **Chris Parkin** tries out a homegrown rifle from Steel Core Designs...

he Steel Core Cyclone rifle stands out as one of the few ultra-modern law enforcement and military application rifles designed and manufactured in England. Available in LSR (308), similar MSR (338) and slightly modified HSR (50 BMG) formats, it's a rifle thoroughly designed from brake to butt to work as a totally homogenous unit for precision shooters. I have used both LSR and MSR on multiple occasions for one off shots, with technical differences between the two virtually unnoticeable other than calibre,

but have chosen to concentrate on the 338 MSR, as I believe the weight and proportions of the gun suit the larger round better. That's not to say the LSR is outshone, just that I wanted to really work out to 1000-metres with the large but polite Lapua calibre that offers so much to the long-range shooter.

This rifle has the longer 710mm versus short 510mm, five flute match barrel, tapering straight up from 22.2mm behind the fitted six-port brake (threaded in position with locking screws to index it), into the cylindrical forend of the chassis toward the all steel action. All mechanical



A six-port Muzzle Brake is included, threaded on and clamped to remain indexed. Its directed blast area keeps noise well clear of the rifle's shooter

steel components of the barrel and action feature VDP (Vapour Deposited Polymerisation) coatings to enhance lubricity, wear/corrosion resistance and to complete the modest black/flat dark earth colour scheme. It's no surprise in the current political climate to read dry and dusty conditions are specifically catered for and these coatings represent the latest high technology solution to their threat on such precision engineering.

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Two magazines

are supplied

with the rifle,

Bipod legs extending with sprung clips extend from a cylindrical bracket that blends into the forend's tip. It has in-built cant capability with a tension adjuster, can be removed with a twist from its locking lug if desired and folds down to lock perpendicular to the barrel's axis to support it from 9-13-inches from the ground. Steel Core are keen to point out that this bipod is rotationally floating around the bore's axis to aid accuracy and I will agree that on firing, there is noticeably less applied torque transmitted to the bipod's feet and subsequently, faster to settle back into position (all this is in milliseconds) to assist your view of the bullet into target or to follow up the first shot with a regained point of aim.

Impressive forend

Picatinny rail surrounds four sides of the 390mm forend; with the upper black rail being a true linear continuation of the 30 M.O.A. inclination running 600mm in length from the action for scope mounting, with plenty of space for any forward night vision or thermal imaging sight. 200mm lateral rails are spacious enough for any imaginable accessory, certainly that a civilian user would desire or require. Twenty-four oval slots are machined through this forend to aid cooling airflow and reduce weight but stiffness is absolute. The underside shows a full-sized carry handle, which you will appreciate on a gun weighting 9.64kg (including 1400-grams of scope and rings). With the knurled bipod locking collars pulled outward, the legs flip down and the gun sits purposefully on the floor, with the butt folded the gun rests on the base of its grip. The butt doesn't lock folded, which is a slight disappointment until it solidly clicks into position longitudinally at the latch in front of the cheekpiece. There is a solid chassis running the full length of action and stock but the looped rollover under the cheekpiece and other accessories that surround it

are blended smoothly with modest facets and grooves deliberately machined on the wider surfaces to break up the otherwise angular profile.

This gun is a performer but given the extra few minutes of computerised machine time, I'd quite liked to see a bit of aesthetic detailing surrounding the engineering, as it lightened the gun visually if nothing else. The rear end shows a quickrelease monopod that drops up to 63mm with a catch to the right-hand side of the butt into general position with three locking stages. A generous screw foot offers an extra 35mm of adjustment that sees the gun speedily adjusted onto target. In honesty, I'm not usually a monopod fan but that's because a lot of them are tedious to operate, yet I find Steel Core's design naturally cohesive with my non-firing hand's position, with intuitive control leading to some great results. I will tick the box here, great monopod!

Nice butt!

There is a secondary carry handle under the butt, which as received, offered an ideal 14½-inches/370mm length of pull. This can be adjusted with spacers before the solid 22 mm recoil pad plants and grips comfortably into your shoulder pocket. It's firm enough to spread all recoil forces without feeling squidgy and imprecise, which I think is crucial to the feel of a gun at such a critical point of transitional movement, imparting forces from mechanics <complex-block>

to the 'organics'. It's commonly overlooked by manufacturers of currently 'fashionable chassis rifles', trying to copy the ergonomics of guns such as this, yet stumbling disastrously over the simplest and most obvious part. A 5mm Allen key into the right side of the stock can slacken the pad for vertical adjustment but as the linear recoil forces of the gun in its true 'tube' format keep the recoil path linear with the barrel's axis, within the recoil pad, muzzle movement is consequently extremely well controlled. The muzzle brake and weight of



Having the bipod rotational axis in line with the bore aids stability before each shot and post shot aimpoint re-acquisition

the rifle, even shooting 300gr bullets down that long 10-inch twist barrel, further encourage the muzzle to remain calm.

This linear build style with tubular forend, solid locking hinge (the folding stock enables easy bore sighting, bolt removal and cleaning without cheekpiece alteration) and a scope comparatively high above the bore requires good cheekpiece ergonomics and I liked the Cyclone's. The comb/ cheekpiece is a black segment complementing the tubular rebate into which the bolt reciprocates and shows 20mm of vertical adjustment via a rotary wheel with sprung detents to lock position. Remaining slender, it tucks under your cheekbone rather than forcing your jawbone away from the centreline of the gun and although showing no lateral adjustment, it was comfortable for me and most thankfully, keeping well off your cheekbone prevents that horrible dead concussion some guns enjoy transferring direct to your rattling brain.

On that note, I'm quite a moderator convert these days on

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large calibres, as the previously mentioned complaint, along with the external concussive pressure wave off a brake, is very tiring. An ASE SL7 (this is a superb mod and most suited to the calibre, I have used it many times) moderator had been made available with this gun but I never got around to using it, the installed Steel Core brake removed significant recoil with the noise directed away from your head too. Watching the blast patterns in long grass showed the shape of the exit ports was projecting gas more sideways than rearward and it's another subtle thing I liked about the Cyclone. Other shooters may have been less than impressed, as with all braked rifles, but as a shooter I was comfortable throughout the 50-round session, fired over mixed ground conditions (quarried slate to long grass) at four locations.

Heart of the matter

Steel Core's most unusual feature is a four-lug bolt within the 35mm diameter action. It's a push feed, with cartridges stripped from a twin column, 10-round magazine feeding into the chamber. The gun boasts a very fast lock time of 1.5-milliseconds, minimised by short firing pin travel and firm strike from the audible springs within that resonates a distinct 'ping' through the stock when the two-stage trigger is squeezed. This crisp release on the second stage is totally predictable, with a factory set 1.5kg weight. It

sounds heavy on paper but is so crisp, with such minimal overtravel, it suits the slow precision fire rifle perfectly, with the blade showing adjustment to reach from the ambidextrous grip. The safety catch lever operates with deliberate movement between its fire/ safe detents, pivoting from the upper right side of the integral trigger guard machined into the centre section of the chassis and incorporating the magazine well. Two steel magazines are supplied and drop under their own weight from the gun with a single release catch to their rear, within reach of your trigger finger.

A four-lug bolt has to power all its functions in half the rotational stroke at 45-degrees versus the 90 of a common twin lug design. A long teardrop handle offers greater leverage to facilitate this. Lift is short and stiff, yet seems appropriate to

the weight of the gun and never feels like a mere tea spoon in a saucepan. It has a defined combination of close tolerance precision engineering with a slick stroke for the large but comparatively gentle giant 338 cartridge that shows few caveats toward pressure problems with masses of factory ammunition or handloads. It's a bit 'engine' and works beautifully, without the small man syndrome some cartridges bestow upon their owners. The bolt's face shows a single claw extractor and plunger ejector. It's a new design to me, as rather than being permanently sprung, the plunger runs through the bolt head and impinges on a fixed stud to eject the case, only when the bolt is fully rearward and laterally aligned with the ejection port. This saves your brass from being whacked against the chamber's entrance as the

338- and 1015-metre targets go hand in hand with 1800-metres suggested capability with the 710mm barrel option (ammunition dependent)

"Steel Core are keen to point out that this bipod is rotationally floating around the bore's axis to aid accuracy"

> neck leaves the leade area. I haven't seen this combination of a fixed/plunger ejectors before and it certainly requires precision machining but is a rather pleasing concept to have included with the rifle, allowing better control of ejection speed for your engagement scenario.

Range time

I was loaned the Cyclone for a day to myself on the 100- to 1000-metre range at WMS Firearms Training. It was zeroed with an appropriate scope mounted that made shooting the gun an immediate pleasure. I confirmed one round at 100-metres, to see what a cold barrel shot was like, before engaging steel at 300-metres. I'm not looking for a Benchrest accurate gun in these conditions, especially when using factory ammunition or in this case, HPS Target ammo, driving



I did think it a little disappointing that the butt doesn't lock in position when folded



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1.5kg trigger







Four lug bolt head with extractor and manual ejector. This responds directly to operation speed of the bolt, so faster cycling flings brass further

the dastardly reliable 300 gr Sierra Matchking bullet at a chronographed 810-metres per second. Steel Core promote sub half M.O.A. accuracy (1/2-inch or damn near at 100-yards) and are keen to note that rifle performance is influenced by both shooter and ammo choice. The HPS ammo has been 100% reliable in the past and here performed likewise. Shots at 300-metres on a 300mm plate struck centrally in zero wind conditions, with a dirty cloverleaf overlap of the unmeasurable five shot group.

I had a few shots at 500and 700-metres to give an initial test of my quickly built ballistics program on the Kestrel, needing little more than a click or two of correction for windage and spin drift as the distances extended (338 holds very steady in light shifty breeze at close to mid-range compared to smaller calibres). Then, I took the vehicle off to the top of one hillside to

engage a quarry full of targets at 1015-metres. I didn't want to waste the ammo at short range and given the sub one-metre/ ssecond wind speeds that day, it was an ideal opportunity to shoot across a wide grass plain from the elevated firing point. Spotting bullet trace and fall of shot needs great optics on a spotting scope and even better one if you are self-spotting with your own rifle as it's shot.

The key matter is whether the rifle remains docile through the shot sequence and given the time lapse between recoil and bullet strike attributable to the range of flight, remaining close to or even staying stationary on your point of aim is a huge feedback loop on the performance of a gun. Lots of guns shoot very accurately on paper but doing it every



The monopod shows fast control of both major and minor incremental adjustment for fast precise elevation control

time regardless of position and having a rifle that can be inherently stable is crucial and here is where I like the combination of the three factors the Cyclone shines through. Physical recoil force control through weight, balance and the quieter than expected brake. Ergonomic stock design with that recoil passed linearly to the shooter with minimised muzzle movement establish fast target re-acquisition and self-spotting fall of shot.

Finally, the totally hasslefree operation of the action and monopod, with a bipod position that allows the weight of the gun to hang from rather than teeter above its bipod.

TECHNICAL SPECIFICATION

Model: Calibre: Magazine:

(SB) Length: (LB) Length: **Barrel Twist:** SB Overall Length: SB Folded Length: LB Overall Length: LB Folded Length: **Operational Weight: Stock Colour:** Accessories: **Other Models:**

Price:

Contact:

Lastly, I like the 338 Cyclone because even through all this deeply technical manufacture and innovation, the gun never feels dead to shoot, with recoil that is present but never sterile, you still feel like a shooter.

Conclusion

Watching your own bullet trace in flight from such a calibre and consistently seeing your own 'splash' is high praise for the shootability and recoil control of this rifle. All the components, like bipod, monopod, trigger, cheekpiece and stock work in harmonious union, to make the shot happen and made the gun plain easy to shoot well. A worthy contender! GM

Steel Core Cyclone 338LM 8.6 x 70 (338 Lap Magnum) 2 supplied, 10 Rounds per Magazine Short Barrel 20-inches 51cm Long Barrel 27-inches 71cm 1:10-inches/1:24.5cm 44-inches/112cm 33-inches/84cm 51-inches/129cm 40-inches/102cm 17.2 lbs/7.8kg Black and Dark Earth Muzzle Brake, Bipod, Field Tool and Cleaning Kit LSR 7.62 x 51 NATO | HSR 12.7 x 99 (50 BMG) £5575 inc. VAT. 308 version £4975 inc. VAT WMS Firearms Training www.wmsfirearmstraining.com