Pieter Lerm testing the 50DS Model Rhino on the range

REVIEW: RHINO REVOLVER

BY: Chris Dean

Compared to a semi-automatic pistol, a revolver has two fundamental advantages: it does not jam and does not need manual safeties. The disadvantage is purely ergonomics.
Rhino, a revolver with optimal ergonomics, is “perfection” in a handgun.

ERGONOMICS

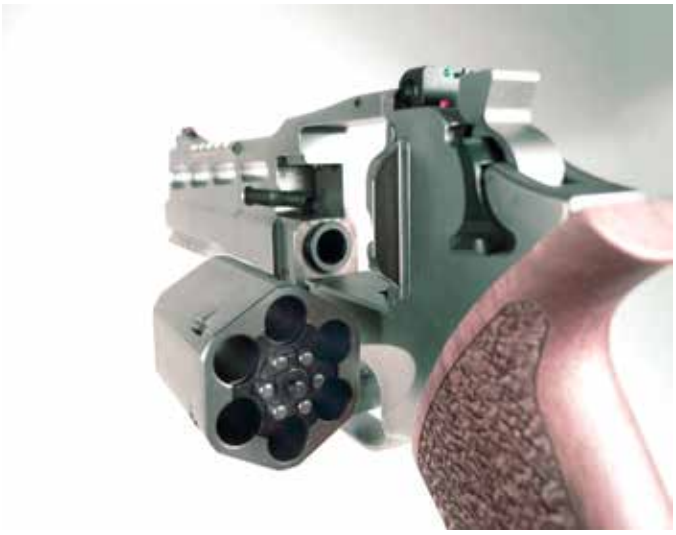
Defence revolvers, due to their reduced size and weight, are unpleasant to use. The hilt is often very thin and the muzzle flip is strong as the fulcrum is relatively high. The negative consequence is that those who use this type of handgun for personal defence, mostly neglect training.
Rhino gives a new dimension to revolver ergonomics: its compact shape is not comparable to any other handgun of the same calibre and class. The cylinder has a hexagonal section, so you will always have a flat surface against your body for maximum comfort. The cylinder release is designed to allow you to open the cylinder easily with one hand. The grip of the revolver can be either wood or neoprene, and is designed to allow for a steady grip even if your hands are sweating. Sporting versions are available with three grip sizes to perfectly fit the hand and the style of the shooter.

PERFORMANCE

Instinctive shooting

With any handgun you must be able to position the firearm while looking at either the target or threat area. This alignment - real or ideal in case the rear sight is missing - forces you to rotate the wrist upwards – a position which, though acquired from muscle memory with training, is very uncomfortable. The Rhino’s barrel is the ideal prolongation of your index finger. This allows you to be in a correct shooting position naturally, and pointing the weapon becomes as easy as pointing your finger, while your wrist remains virtually straight with the axis of the bore in line with your forearm.

Right side view of the Rhino stainless steel revolver



The barrel at the bottom of Rhino firearm as seen from the back

A dramatic reduction of recoil
As the wrist is almost straight, the recoil is discharged on the straight arm. To give an explanation according to the laws of physics, the "arm of the lever" is very small, and this nearly eliminates the "dynamic moment" which follows the shot in all handguns. Basically, the dynamic moment becomes a static moment, nullifying the amplification of the reaction to recoil which generates on the top of the hand.

Lack of flip-up effect
The strong pressure generated by a powerful calibre usually causes a muzzle flip effect after shooting (dynamic moment), which is proportional to the lever angle created by the high position of the barrel and consequent angle of the wrist. The muzzle flip effect has two negative consequences: one is the physical strain, both when you bear the knock and when you counterbalance it, pushing your hand with equal power into the opposite direction to regain the initial position. The second is the time you lose while your arm and hand are travelling up and down, which is obviously taking time on the sequence of shots.
Rhino revolvers require a wrist angle near to zero, thus minimising muzzle flip and related consequences: subsequent shots on a target are all in the centre, and do not tend to slide upwards.

Trigger pull
The trigger pull system of all contemporary revolvers is an evolution of the systems designed in the 19th century, which were based on a manual adjustment of each single weapon. With modern revolvers, the impossibility of manual adjustment highlights all the conceptual defects of the old mechanics. Rhino is the first revolver with a truly modern trigger system, designed for a serial, industrial production. The cocking of the single action is made through a pin and not though the hammer, whose position is very low (like no other handgun). This pin moves a lever which never interferes with the trigger pull and goes back in its original position after cocking the hammer. All the devices designed on the entire cycle of the trigger pull system allow for greater fluidity, lightness and steadiness when shooting.

Safeties
Additional to all the standard safeties of modern revolvers, Rhino features brand new safeties. To avoid accidental pressing of the hammer, the handgun in single action mode is blocked and shooting is prevented. Premature shot in case the cylinder has not completed its rotation is prevented by a pin which is connected to the cylinder and functions at the same time as trigger stop. The rotation of the cylinder is not operated by the "rotation star" in the extractor, but by pins of tempered steel fixed in the cylinder itself. This solution prevents the parts in rotation to be subject to the wear and tolerance of the extractor. Finally, the cylinder lock is linked to the trigger and prevents shooting if the cylinder is not blocked in the correct position.

Concealability
Rhino's unusual shape makes it difficult to recognise as a weapon. Even when it is carried in a pocket of light fabric, it is not easy to identify it as a revolver.
The trigger system designed by Gamboni is an absolute innovation allowing for a very compact revolver shape. Thanks to these mechanical attributes, Rhino is 1.5 cm shorter than any revolver of equivalent calibre and barrel length. The Rhino is perfect to wear concealed, regardless if it is under the arm, belt, or even with an ankle holster.

Materials
The frame is made of Ergal, an excellent, high resistance light aluminium alloy. Its special feature is that the breech bottom is made of steel and is mounted to the frame through a dovetail insert. Grips are interchangeable on all models, and are made of neoprene or wood.

The view from the front cylinder open.

Left side view, note flat sides of cylinder.

TECHNICAL CHART

Calibre:	.357mag
Mechanism Type:	single action/ single and double action
Sights:	fixed on all defence models, adjustable on all target shooting models
Rifling:	6 grooves, rate of twist 1 x 18 ¾" (476mm)
Barrel Length:	2" – 4" – 5" – 6" 51 mm – 101 mm – 127 mm – 152 mm
Overall Length:	6 ½" – 8 ½" – 9 ½" – 10 ½" 164 mm – 215 mm – 240 mm – 266 mm
Capacity:	6 round
Weight:	1,58 lbs - 720 gr

An under the bonnet look at the insides of the Rhino 50DS revolver

The Rhino .357 Magnum produced in the factory at Azzano Mella features an interesting characteristic. The cylinder is machined in such a way that it is possible to use the gun both with and without moonclips (Rhino models with calibre .40 S&W and 9x21 can be used with their relevant moonclips).

Special machining of the breech side of the cylinder housing is for the moonclip. The thickness of the moonclip corresponds exactly to the depth of its seat, and thus the moonclip is able to keep the cartridges in the correct position and at the same time the cartridges rest on the external part of the cylinder, allowing the use of the revolver also without a moonclip. The use of a moonclip guarantees precise and fast loading and unloading, which is particularly appreciated in competition. In the box, together with the revolver, you will find three moonclips and a special tool to "release" the empty shells from the moonclip. Loading the cartridges in the moonclip doesn't require any tool – cartridges may just be pushed into place.

Suppliers:

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View of moonclip being inserted into the cylinder

The sights on the Rhino are clear and easy to see