



Naturally, there are many possible reasons for 'nine point nines'. Alongside the many mistakes that the shooter can possibly have made, suspicion falls above all on the rifle and ammunition. Only right at the bottom of the list do we get to the possibility that maybe the barrel is dirty...

Experiments conducted using a test-rig show that irregular cleaning of the barrel can lead to up to two millimetres increase in group size. This is a whole lot. Just think about how often you were just a tenth away from hitting the middle, and it is

clear that you have plenty of grounds for concern...

It is to be recommended that you clean the barrel after every shoot. In testing, the first effects of dirt build-up in the barrel can be seen after 50-80 shots. After 100-150 it starts to become critical.

Therefore it is best to get used to cleaning as part of the routine you go through before packing your rifle away. Round felt pellets are well suited as a means of cleaning, because they fit exactly to the profile of the barrel. They lift and remove exactly the dirt which leads to inaccuracy, and leave

behind a slight coating in the barrel, which ensures that the accuracy is unaffected straight after cleaning. It is important, though, only to clean from the *direction of the breech towards the muzzle*. This makes it impossible to damage in any way the vitally important inner edge of the barrel at the muzzle.

As a result of wide-ranging experiments at our test-range in Dortmund, we have come to the conclusion that a coated pull-through with felt

pellets is a good solution. This method is easy to learn, and shows clearly whether the barrel is clean or not. What is more, this cleaning gear is easy to store in the shooting bag, as it doesn't take up much room.

Cleaning smallbore rifle barrels is a science all of its own. Sticky deposits build up, caused by powder, lead and moisture, which can set quite hard in the barrel.

Experienced shooters give themselves plenty of time to clean their barrels carefully after training and competition. Chosen cleaning fluids, brushes, patches and pellets are used to polish the barrel to a mirror finish. The last step is to put a light oil film on the barrel's inner surface, in order to protect the rifling from moisture damage which can be caused by changes in temperature.

Experienced shooters in your club can give you instruction in the secrets of barrel-cleaning. They will be happy to show you their choice of method and cleaning fluid, as well as demonstrating how it is done...



The value of cleaning the barrel is very underestimated, especially when it comes to air rifle and air pistol. In order to avoid all possible disasters, you need to see it as a duty to clean your gun after every shoot, before packing it away. Felt pellets are the best for this job, because they show without a doubt whether the barrel inner surface is mirror-polished once they have been pulled through.

The muzzle is the most sensitive part of the barrel. So never clean the barrel from front to back without a suitable form of protection! If you clean your airgun barrel very intensively, for example with chemicals and a bronze brush, you should expect that it will take 20 - 30 shots at least, before you can expect to reach the optimal grouping capability. So any drastic action of this nature should only be carried out before training sessions.

A good way of learning how your barrel behaves and when it needs cleaning, is the ammunition test. Leave your barrel for over 200 shots without cleaning it, and then shoot



one or two groups on the test-rig with it in this condition. Then clean and take a good look at the first three felt pellets. Then shoot another two groups with the same ammunition and compare the group sizes.

A lot of people are of the opinion that a cleaning patch that is very tight in the barrel will clean better. Our experience is that force brings little benefit. Medium and consistent pressure are fully adequate. What is clear, is that perfect scores such as are seen at top level or in supported shooting, mean that cleanliness assumes decisive proportions. Every second 9.9 *could* be a result of poor cleaning...

