



UKBR22 Introduction to Equipment & Accessories

For Juniors and Novices to Benchrest Shooting



This booklet is not meant to replace any existing knowledge or handbook, but to provide an insight into the equipment you can buy and use for Rimfire Benchrest shooting.

Often a shooter new to the sport has to glean information from a variety of sources. Our website links help with this on the manufacturers links page.

The information on the following pages shows a variety of equipment that you can purchase to aid the determined shooter to gain supreme accuracy.

For further information about techniques and setting up your equipment refer to the FAQ's page on the UKBR22 website. Further reading may include;

Benchrest Actions and Triggers by Stuart Otteson

The Ultimate in Rifle Accuracy by Glenn Newick

Rifle Accuracy Facts by Harold Vaughn

Or other good books on benchrest shooting or rifle accuracy.

Disclaimer

UKBR22 and its management committee do not promote individual products and the onus is placed on the people purchasing said items, to ensure the correct functioning of all products purchased.

People are advise to read manufacturers instructions. This booklet is not intended to and does not replace manufacturers instructions.



A Rimfire Benchrest setup, with custom rifle, rear and front bags, front rest and high powered scope.



Types rifle by weight

Unlimited Class— over 10.5 Pounds



Anschutz 2012 Sport

Any custom, Prone or 3 position rifle would be good to start off with for Unlimited class, although some modifications may have to be made to shoot from a rest. The forestock should be flat or parallel to the barrel, as seen in these two examples. A variety of manufacturers make Unlimited class rifles in a range of stock and action combinations. The picture below is the successful Anschutz BR50 which is an off the shelf benchrest specific rifle.



Anschutz BR50

10.5 Pound Class



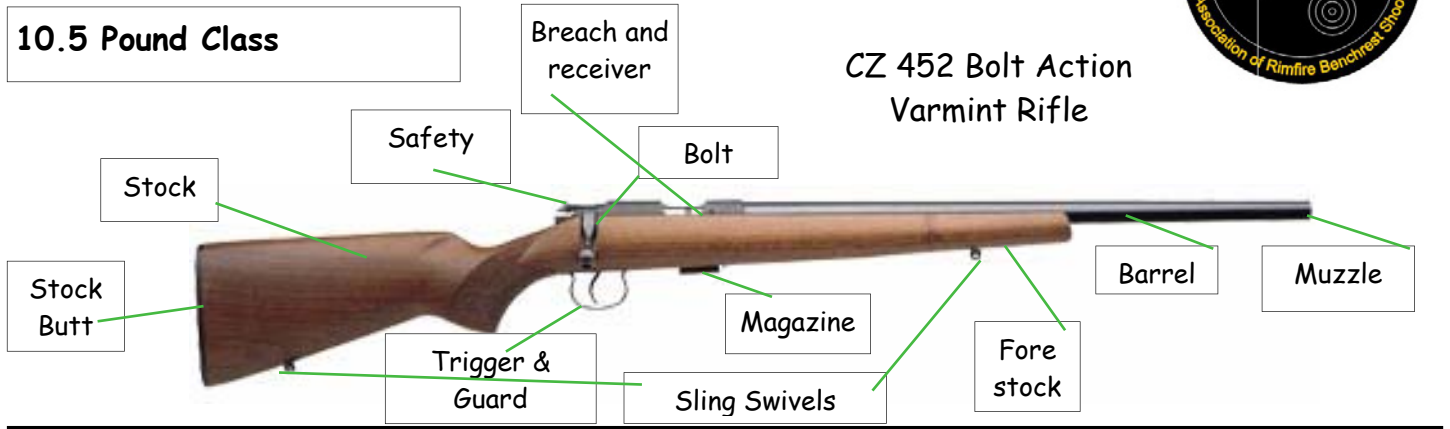
Sako Finfire

Other rifles and Parts of a Rifle

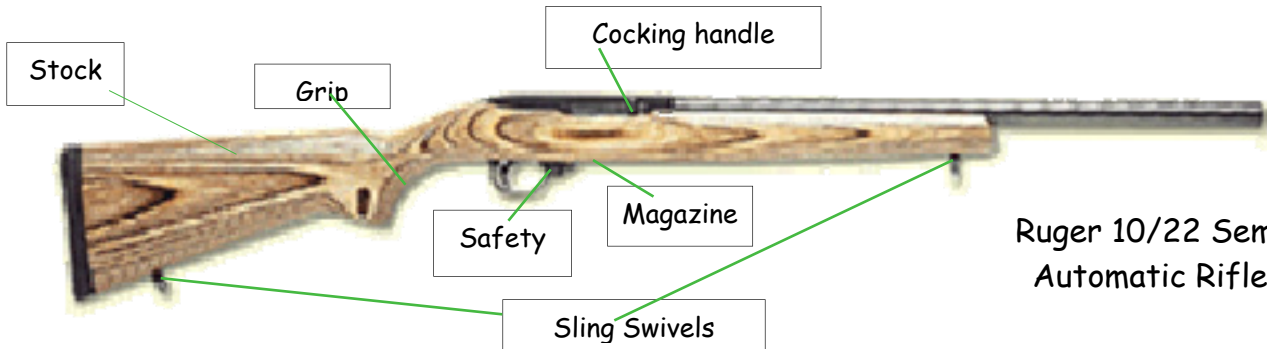


10.5 Pound Class

CZ 452 Bolt Action Varmint Rifle



Ruger 10/22 Semi Automatic Rifle



10.5 Pound class utilises a variety of rifles that can be bought off the shelf. Most CZ rifles fit into this class or with a lighter scope even the Sporter class. Any standard rifle with a heavy barrel usually fits into the 10.5 Pound class, but remember the weight is with everything, including the scope. Even semi-automatic rifles such as the Ruger 10/22 can be utilised for rimfire benchrest. Whichever rifle you choose consider one that comes or can be changed to have a good quality trigger. A good trigger is the basic element of having an accurate rifle.

Sporter Class—up to 7.5 Pounds/ Hunter Class - up to 8.5 Pounds

CZ 452 Bolt Action Lux Rifle



Like 10.5 Pound class, Sporter utilises a variety of rifles that can be used off the shelf. (Do consider getting a good trigger job.) Scopes do have limitations within the rules and you need to check what weight you are aiming for with these rifles. Most firearms manufacturers produce a Sporter rifle in bolt action or semi-automatic actions.

Anschutz 1516D Classic Sporting Rifle



Ammunition



There is a variety of ammunition on the market. It is here that you do need to spend money on the best you can

afford. The better brands do hold groups better and therefore are more accurate. What you do have to find is the ammunition that your rifle likes and ensure you can get that type and batch all the time. Below are some examples of brands that have shown to be successful. There is a lot of research on the internet



that you should look at and we suggest you start by visiting the ammunition manufacturers websites. (These links are on the UKBR22 website.)



Rim Thickness Gauge

Ammunition accuracy is constantly being sought. There are a variety of tools to help you ensure



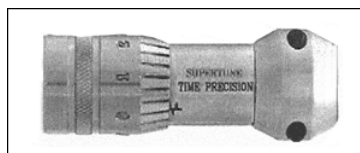
Concentricity Gauge

your ammunition is the best at all times. The concentricity gauge ensures that ammunition is tested for case/ bullet concentricity, i.e; they are both fitted together properly.



The rim thickness gauge tests for how thick the rim is on rimfire ammunition. Although this may be small, slight differences do occur and this means the bullet head can be closer or further away from the rifling in the barrel. This can cause shots to be inaccurate. Using this tool allows you to have batches of ammunition that shoot in the same way.

Accessories

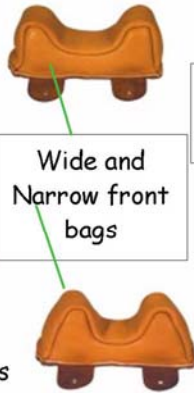
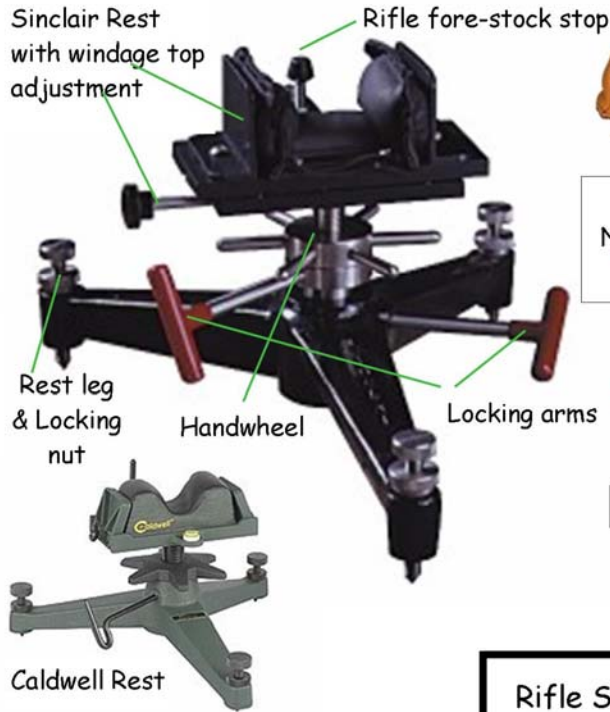


Barrel turners are devices that are fitted to the muzzle of the barrel or on the length of the barrel. They are in fact sophisticated weights that alter the harmonics of the barrel.

This gives more Accuracy to the rifle once the barrel has been 'tuned' to the specific ammunition and the way the action has been set in the rifle stock.

These are quite expensive products that take a while to fit and get used to. It is suggested that they do provide the extra few millimetres to achieve the best accuracy possible. Experimentation is required when setting up one of these products.

Rests and Accessories



Wide and Narrow front bags



Bunny and Rabbit ear rear rests



Rest level



Rests come a variety of shapes and sizes and the costs reflect this. The cheaper models are sometimes good to start with and the Caldwell is the best of these, having a wide base. Having a windage adjustment on the front rest is an advantage, as it allows horizontal movement of the rifle. Bags are made out of leather or Condura. It is down to taste and personal experience to determine which material is better. A spirit level is a must on the front rest, and possibly the scope, to ensure the rifle is level in the rests.

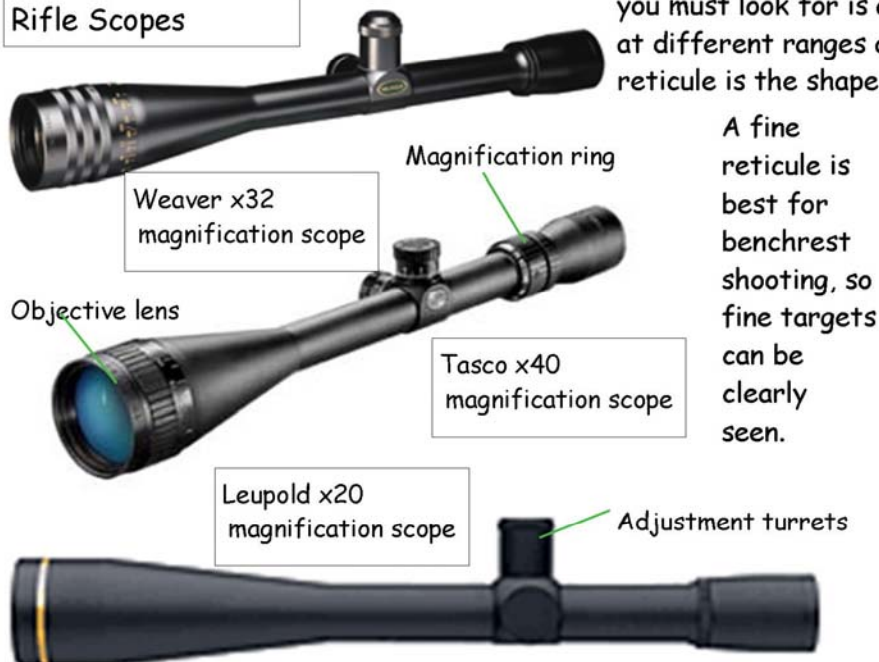
Rifle Scope Rings

Good scope rings are essential to secure your scope to the rifle. A mount or rail may also be needed depending on your rifle. Most for rimfire are made from aluminium, steel ones are better but more expensive. Scopes should not be attached too tightly otherwise the scope will be crushed. Retaining bolts need to be fixed with a thread locking solution.



A rifle needs a scope and the more magnification for benchrest the better. Some Sporter classes do have limitations on the magnification you are allowed. Scopes range from £150 to £2000. You will need to decide which is best for your needs. Only by seeing a scope will you be able to purchase it. One thing you must look for is an adjustable objective lens if using at different ranges and the type of reticule it has. The reticule is the shape of the aiming image in the scope.

Rifle Scopes



A fine reticule is best for benchrest shooting, so fine targets can be clearly seen.

