

Rim-Sorting Devices

To sort the ammo used in this test, we used three products: A \$44 Neil Jones 22 Rimfire Accuracy Gauge, a \$22 G-3 Rimfire Thickness Gauge from Sinclair International, and an \$85 Bald Eagle Rimfire Cartridge Gage. The Jones and Bald Eagle gauges include measuring devices. The G-3 gauge is designed to work with dial or digital calipers, which are sold separately. Mitutoyo electronic dial calipers sell for around \$135. Starrett 6-inch stainless steel dial calipers sell for around \$140. Here's what we thought of each item.

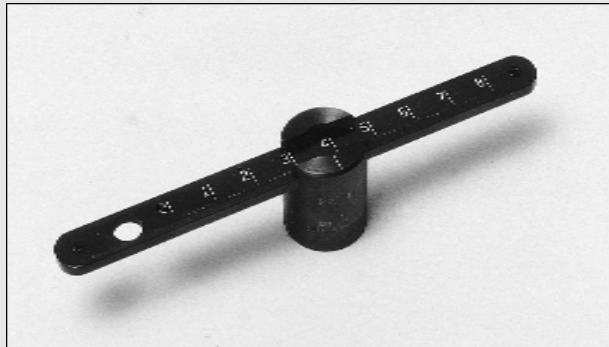
Neil Jones 22 Rimfire Accuracy Gauge

This product is the most mechanically simple of the three gauges we tested. It consists of a cylindrical steel bullet receptacle sleeved to accept a steel sliding index scale. To use the gauge, the shooter takes a round and drops it through a hole in the scale arm. The cartridge falls into a hole in the cylinder. The shooter then moves the sliding scale, which is marked in thousandths of an inch, from right to left. Because the sliding scale gradually thickens along its length, the rim of the shell eventually drags on the bottom of the scale. The shooter can then read the markings on the index arm to determine the thickness of the rim.

With practice, the shooter can use the Neil Jones 22 Rimfire Accuracy Gauge very quickly. Once the shell-holding cylinder is indexed to an accurate depth, the shooter can sort a round every 5 to 10 seconds. Using a sorting board like the 100-round Sinclair Rimfire Sorting Block (\$9.75) to segregate the rounds, the shooter can quickly arrange two boxes of ammo into four major measurement groups.

However, there are some problems with the device. Indexing the sliding scale requires the use of an accurate caliper and gauge. If knowing what the actual rim thicknesses of your ammo is important to you, you'll still need to invest in a rim-measuring device like the Bald Eagle or G-3 products. That said, it's still possible to sort ammo without knowing its exact dimensions. Once you adjust the shell-cylinder depth to a certain setting, you can run through unsorted ammo simply by using the index scale. For instance, rounds that sort between the 2 and 3 on the index scale go in one group; rounds that sort between the 3 and 4 go in another group, and so on.

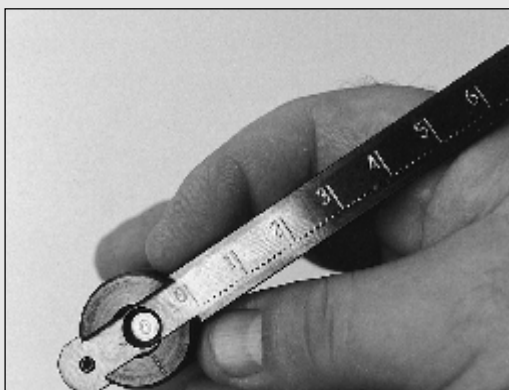
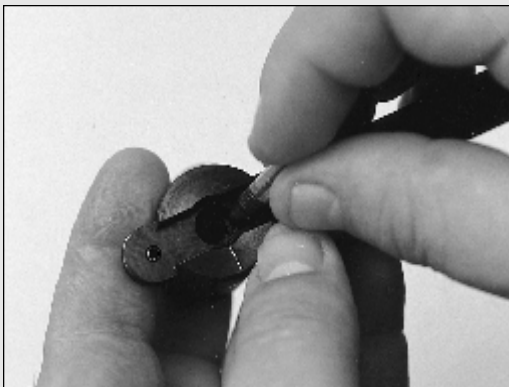
This brings up another downside, however. The Jones gauge depends on the shooter's touch to index the rounds properly. As the shooter slides the index arm over the shell, at some point the arm drags on the shell rim. The shooter must monitor the force he applies to



Above: The \$44 Neil Jones 22 Rimfire Accuracy Gauge consists of a cylindrical steel bullet receptacle sleeved to accept a steel sliding index scale.

the arm at this drag point or the ammo can sort improperly. Also, because rim thickness can vary across the face of a given round, it's possible to insert a bullet one way and get a reading and then rotate the round in the cylinder and get a different reading.

PS Recommends: The \$44 Neil Jones 22 Rimfire Accuracy Gauge is a simple, fast, and easy tool to use. For segregating large amounts of ammo into rough thickness units, it's hard to beat. But because the other gauges are nearly as easy to use and are more accurate, it would be our third pick as a rim-sorting device.

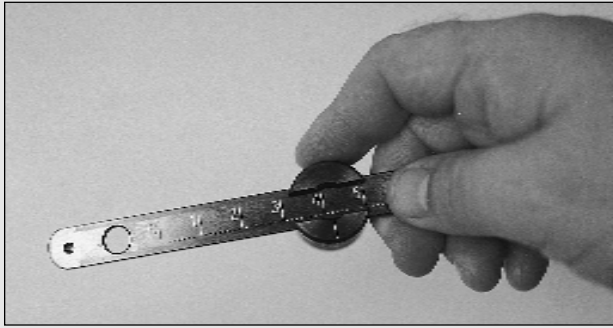


Above: To use the gauge, the shooter takes a round (top) and drops it through a hole in the scale arm. The cartridge falls into a hole in the shell cylinder (bottom), and the shooter moves

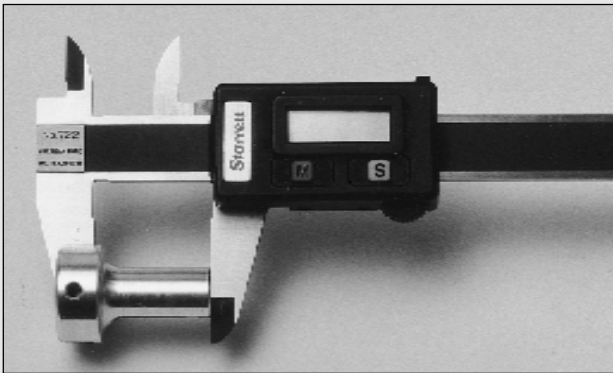
G-3 Rimfire Thickness Gauge

This \$22 device, available from Sinclair International, is a 1.45-inch plug-shaped piece of aluminum that fits onto a dial or digital caliper. It contains a cartridge-shaped cutout into which the shooter inserts a bullet. To use the gauge, the shooter sets the zero on the caliper, then drops a round in the cutout. He then runs the caliper arm down onto the cartridge rim. The caliper reads out the thickness. (We prefer a digital caliper for this operation.) Because of the caliper, the unit can be cumbersome to use. However, we found that by holding the caliper body in the right hand and using the left hand to insert and remove the rounds, we were able to sort a round every 5 to 10 seconds. Though the maker recommends using a neck lanyard that comes with the device, we thought the cord just got in the way and removed it.

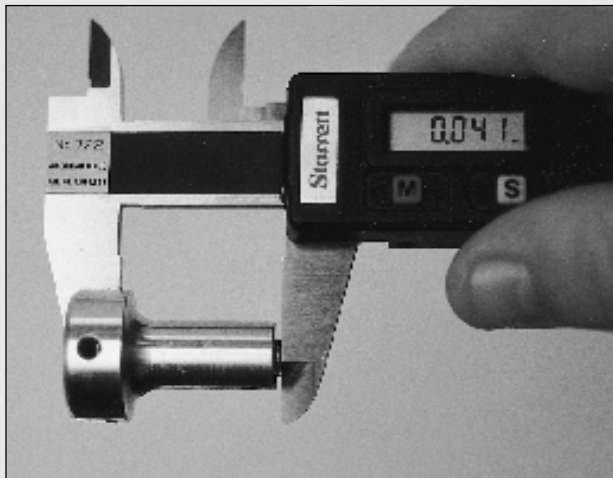
Advantages the G-3 Rimfire Thickness Gauge has over the Neil Jones 22 Rimfire Accuracy Gauge include its accuracy and repeatability. With an accurate digital caliper, getting the actual rim thicknesses of your ammo is easy. Using a separate device isn't necessary. Also, run-



Above: The shooter moves the tapered sliding bar on the Jones device. It is marked in thousandths of an inch. Because the scale thickens along its length, the rim of the shell eventually drags on the bottom of the scale.



Above: The \$22 G-3 Rimfire Thickness Gauge is a 1.45-inch plug-shaped piece of aluminum that fits onto a dial or digital caliper. It contains a cartridge-shaped cutout into which the shooter inserts a bullet.



Above: Running the caliper arm down onto the shell can be done with one hand.

ning the caliper arm down onto the shell is easier to do consistently than dragging the Jones's arm across the rim face. Still, because the caliper arm cuts across the shell

face, it's possible to measure a low spot on the rim.

PS Recommends: If you already own calipers, the \$22 G-3 Rimfire Thickness Gauge is the most economical jig we found to measure rim thickness. It's light and small, and because it can be removed from the measuring tool, it doesn't force you to dedicate an expensive caliper exclusively to rim sorting. In this case, we recommend the \$22 G-3 Rimfire Thickness Gauge.

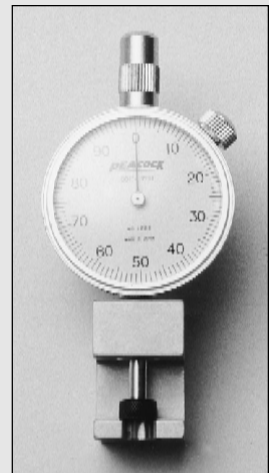
If you don't already own calipers, then you're looking at a sizable financial commitment to make the G-3 Gauge work. In this case, we would buy the Bald Eagle gauge instead.

Bald Eagle Rimfire Cartridge Gauge

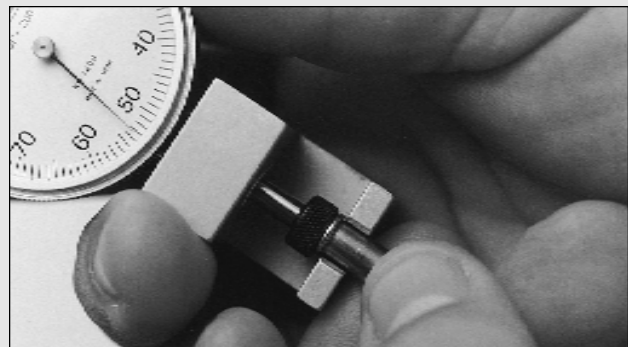
This \$85 device, available from accuracy-shooting supplier Bald Eagle, is a 1.13-inch-long block of brass that fits onto a supplied Peacock dial caliper. It contains a 0.25-inch cutout into which the shooter inserts the body of the bullet. The 0.27-inch cartridge rim fits over the top of the cutout, and a spring-loaded plunger descending from the dial indicator gently pushes down on top of the rim. To use the gauge, the shooter sets the zero on the caliper, then pushes a round under the plunger. The plunger presses down on the rim, and the indicator reads out the thickness. It's very fast. We easily sorted a round every 5 seconds. Also, the 3.5-inch device fits cozily in the hand.

The Bald Eagle Rimfire Gauge is more repeatable than the Neil Jones and G-3 products, we think. The flat plunger fits down on top of the rim face, effectively canceling out low spots. Also, the spring-loaded plunger applies consistent pressure round to round, which makes it better than the G-3 Rimfire Thickness Gauge, in our view.

PS Recommends: For sorting rimfire ammo, we prefer the compact, easy-to-use, \$85 Bald Eagle Rimfire Cartridge Gauge over the G-3 Rimfire Thickness Gauge and Neil Jones 22 Rimfire Accuracy Gauge.



Above: The \$85 Bald Eagle Rimfire Gauge is a 1.13-inch-long block of brass that fits onto a Peacock dial caliper.



Above: The Bald Eagle gauge contains a 0.25-inch cutout into which the shooter inserts the body of the bullet. The 0.27-inch cartridge rim fits over the top of the cutout, and a spring-loaded plunger pushes down on the rim.