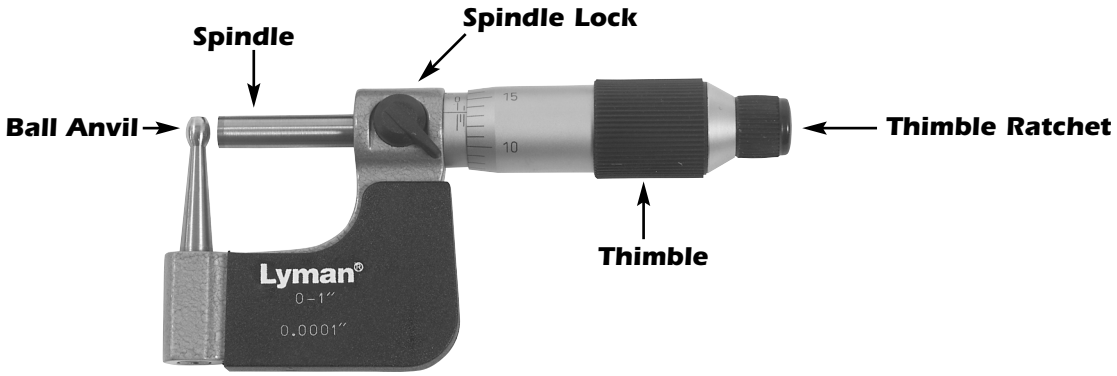
INSTRUCTIONS FOR LYMAN'S CASE NECK BALL MICROMETER #7832252



Thank you for purchasing the 1-inch Lyman Case Neck Ball Micrometer. Your micrometer should give you many years of service with proper care and storage. It is important that the micrometer be kept free of dirt, dust, and moisture. The micrometer should be stored in the case when not in use. The Lyman Case Neck Ball Micrometer allows precise measurement of cartridge case neck thickness to within .0001 (one-ten thousandth) of an inch on cases from 22 Hornet on up. Reloaders can practice measuring with the micrometer by measuring various component bullets of known size. If in doubt, the proper size of bulk bullets should be marked on the box by the manufacturer, i.e. .224", .308", .430".

The micrometer comes equipped with a thimble ratchet. This ratchet should be used to adjust the micrometer during measurements to prevent false readings or possible distortion to the instrument. This micrometer also features a spindle lock to lock the spindle in place to prevent movement once the desired reading is obtained.

Accuracy of the micrometer is easily checked by using the ratchet to close the spindle against the ball anvil. A reading of "zero" should result in the 0 on the thimble being aligned with the "Read Line." This is the long thin line running parallel to the axis of the micrometer's spindle along the full length of the sleeve. Each time the 0 on the thimble is in line with the "Read Line" it represents a full and equal increment of .025".

The micrometer sleeve contains 40 graduations each representing increments of .025 (twenty-five thousandths) of an inch. Every fourth graduation is designated by a single digit number representing an additional increment of .100 (one-hundred thousandths) of an inch from the closed "zero" position of the micrometer, i.e. 1= .100, 2=.200, 3=.300 etc.

The thimble of the micrometer contains 25 lines equally spaced around its circumference. One complete revolution of the thimble represents .025 (twenty-five thousandths) of an inch. There is no numerical indicator for these graduations.

Readings to four decimal places requires use of the scale **on top of the sleeve** marked 1-2-3-4-5-6-7-8-9-0

To read the micrometer, first take a measurement using the ratchet and lock the thimble in place.

- Count off the series of single digit numbers representing .100 increments that are visible on the sleeve.
- Then count the number of smaller lines representing .025 increments that are visible on the sleeve. Each of these lines will need to be added to the largest number representing a .100 increment. If the 0 on the thimble is visible but positioned **above** the "Read Line" do not include the .025 graduation line on the sleeve that is just barely visible under the thimble. If the 0 on the thimble is visible but **below** the "Read line" then the .025 graduation on the sleeve just visible will need to be included.
- Count the number of graduations on the thimble and stop at the one that is on or the closest one **below** the "Read Line" Remember; each line on the circumference of the thimble represents .001".
- If reading to the nearest .0001 is desired, find whichever of the numbers 1 through 0 on the top of the sleeve matches with a graduation around the circumference of the thimble. Whatever number of the graduation indicated on the **sleeve** is then added as the fourth and final digit in the calculation.