TO READ OUTSIDE DIAMETER INCH TAPES





Make certain the tape is free of damage and the tape and object to be measured are both clean.

Each line on the gage member represents .025", while each line on the vernier represents .001".

Wrap the tape around the object to be measured. The vernier scale should be just below the gauge scale. Tighten the tape around the object with 5 pounds tension for O.D. tapes (For I.D. tapes, use 0 pounds tension).

Locate the "zero" on the vernier scale and note the highest value achieved on the gage scale above it (the highest value to the left of the zero). In this example, that value is 5.075".

Next, observe the vernier scale's value at the point where it lines up exactly with a marked division line on the gauge scale. In this example, that value is 6 (.006").

Finally, to obtain the diameter of the object, simply add the two values together: 5.075" + .006" = 5.081"

When reading the O.D. tape, make certain to apply a snug pull of 5 pounds tension, first making sure the tape and part have been properly cleaned.

When using a standard O.D. tape on an I.D. surface, add double the tape thickness to the reading to arrive at the I.D. of the part. It is suggested that direct I.D. tapes be used for inside diameter readings.

As a suggestion for checking very large diameters – pieces of masking tape can be used to hold the tape in the proper parallel position.

Pi Tape® Gauges are guaranteed +/- .001" accuracy on standard tapes up to 144".

Care

When not in use, wipe clean and apply a light rust preventive oil. Store in tape container.

No periodic adjustments are needed.

Make sure the tape has not been stepped on or kinked, which may destroy the accuracy.