

No. 6420

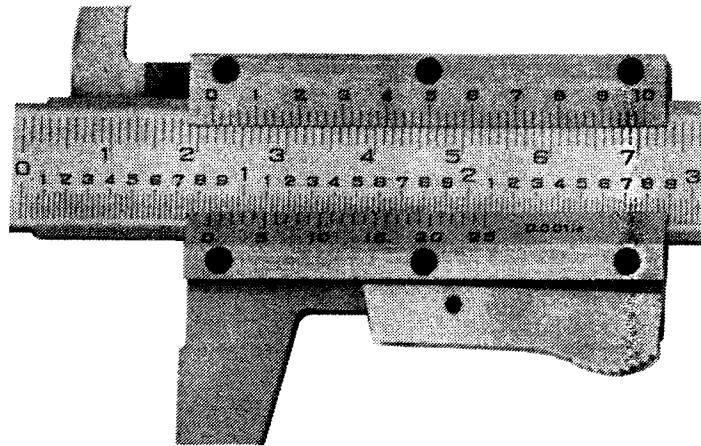
No. 6421

No. 6471

VERNIER CALIPERS

These Vernier Calipers may be used for inside, outside, depth and step measurements. The lock screw on the slide is used when repeat measurements are being made.

Reasonable care will insure the long life of these precision tools. A light film of oil on the bearing surfaces of the main beam is recommended for smooth operation.



ENGLISH MEASURE

On the lower half of the main beam each inch is divided into ten numbered increments or tenths (.100", .200", etc.). Each tenth is divided into four increments of .025" each. The vernier scale on the slider has twenty-five increments, each representing one thousandth (.001").

First read the number of inches and then the number of tenths. Add to this .025" for each additional graduation. Using the English (lower) vernier scale determine which graduation of the vernier lines up exactly with a graduation on the main beam. This vernier graduation is the number of thousandths which are to be added to the previous readings.

Example:

Refer to the English scale (lower) in the above illustration.

1. Number of inches is 0	= 0.000"
2. Number of tenths is 8	= 0.800"
3. Number of .025's is 2	= 0.050"
4. The vernier graduation which lines up with a graduation on the main beam is 3	= 0.003"
Final Reading	= 0.853"

METRIC MEASURE

On the upper half of the main beam each ten millimeters is numbered (1=10mm, 2 = 20mm, etc.). Each ten millimeters is divided into millimeter units represented by a graduation.

The metric vernier scale is on the upper part of the slider. The 6420 and 6421 have 50 vernier graduations of 0.02mm each while the 6471 has 20 vernier graduations of 0.05mm each.

First read the number of ten millimeter units and add to this the number of millimeter units. Using the metric vernier determine which graduation of the vernier lines up exactly with a graduation on the main beam. The value of this vernier graduation is added to the reading.

Example:

Refer to the metric scale (upper) in the illustration.

1. Number of 10 millimeters is 2	= 20.00mm
2. Number of full millimeters is 1	= 1.00mm
3. The vernier graduation which lines up with a graduation on the main beam is the third graduation past the "6".	= .60mm
Number of 0.1mm is 6	= .60mm
Number of 0.02mm is 3	= <u>.06mm</u>
Final Reading	= 21.66mm