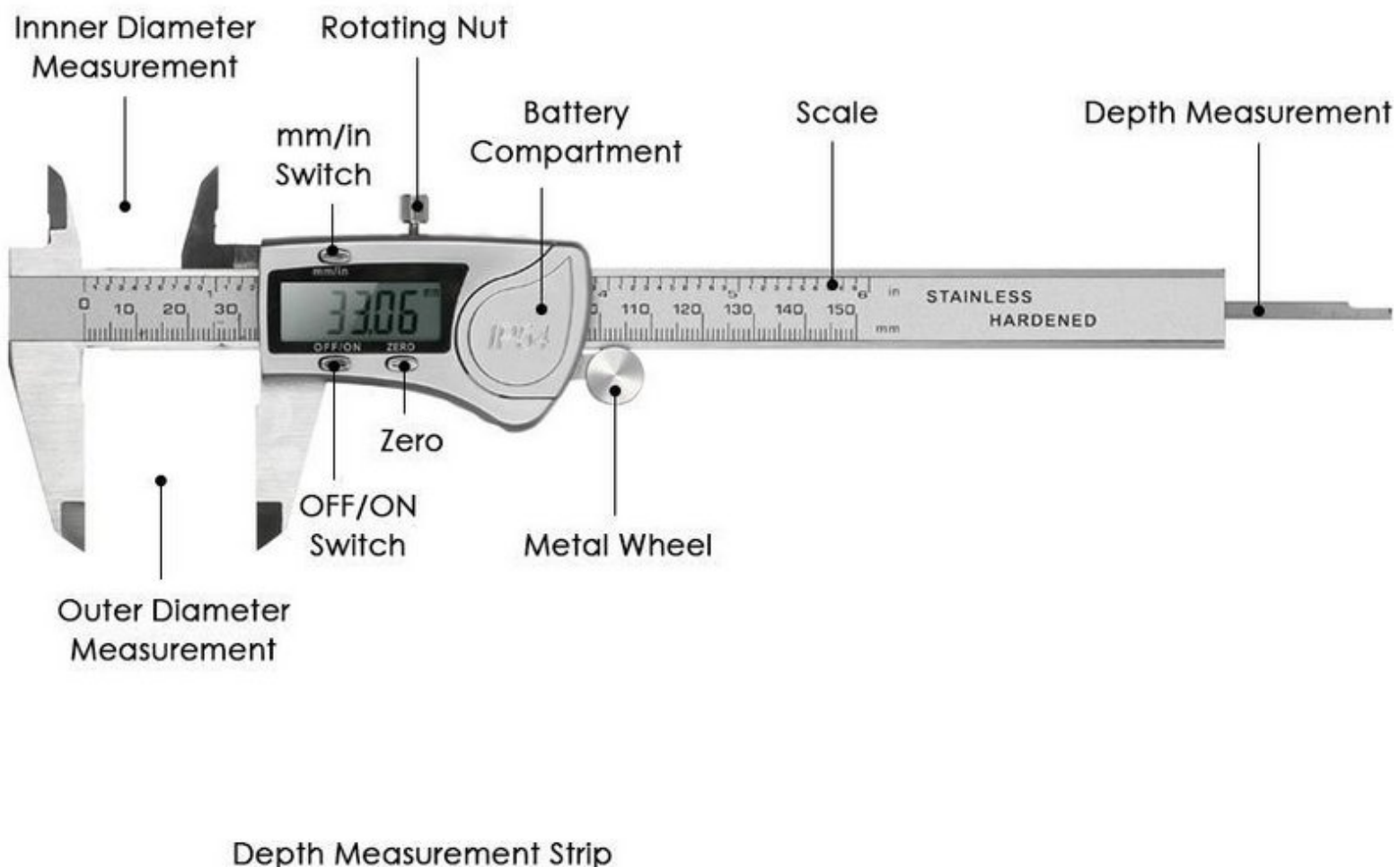




How to Position a Vernier Caliper

This guide demonstrates the different methods for taking measurements with a vernier calliper.

Written By: James Schreiber



INTRODUCTION

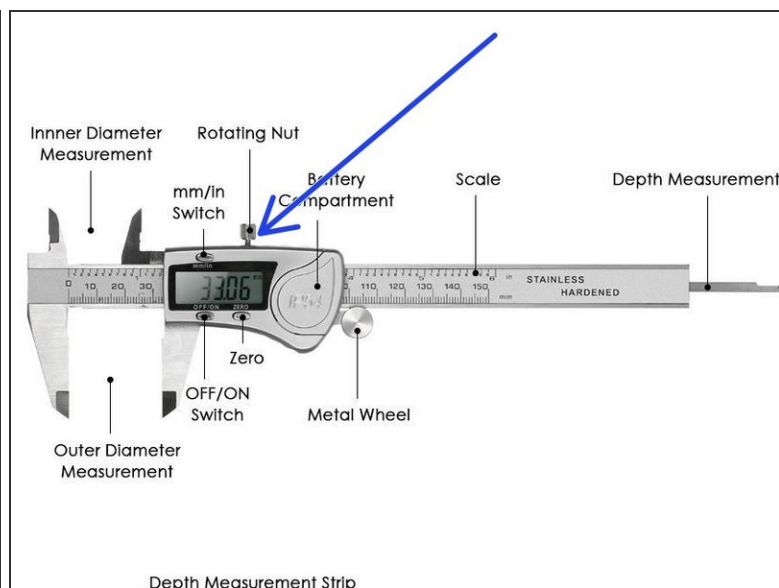
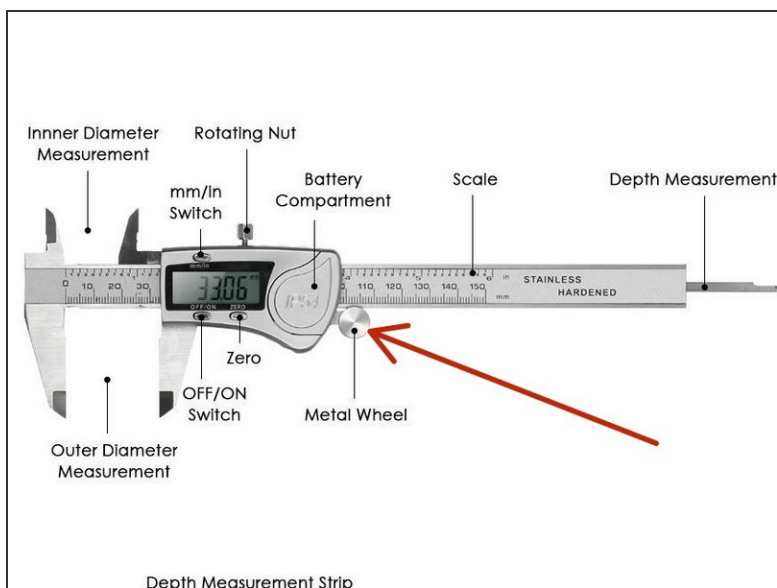
These instructions will cover the techniques for measuring external & internal features, as well as heights and depths.



TOOLS:

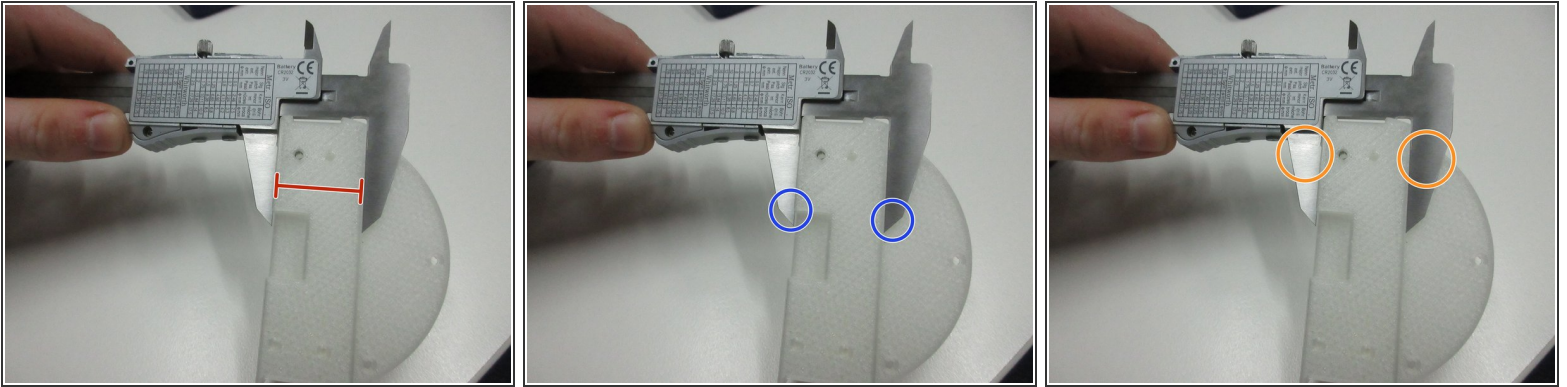
- [Digital Caliper](#) (1)
-

Step 1 — Good Practice



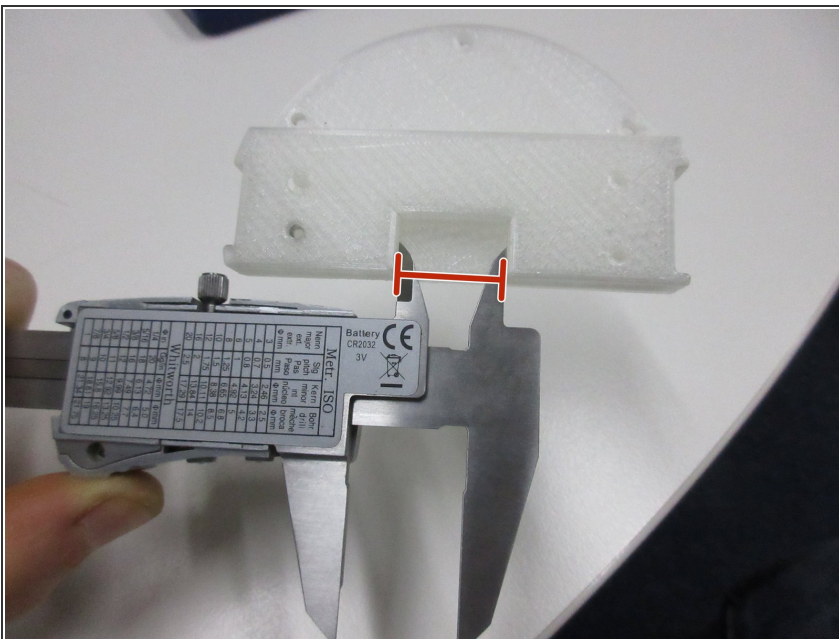
- Use the metal wheel contacting the measured surfaces.
 - ⓘ This will allow for a more repeatable measurement.
- ⚠ Extend the calibration life of the device. Preventing damage to the measuring surfaces or measured part.
- Make use of the locking mechanism.
 - Occasionally the device has to be positioned in a way that cannot be read.
 - Always prioritize comfort. If there is a change the jaws can move when attempting to read. **Lock the device. Move it to you.**
- ⓘ Ensure the part is secure, use flat surfaces, try to use the vernier comfortably with both hands.

Step 2 — External Feature



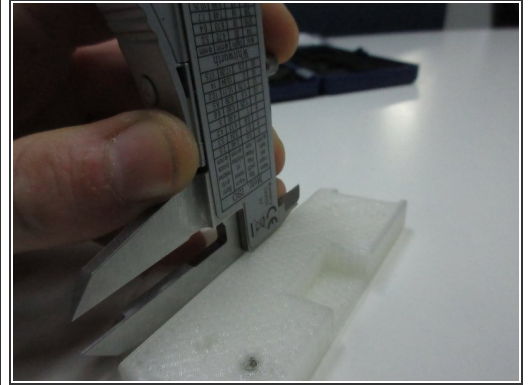
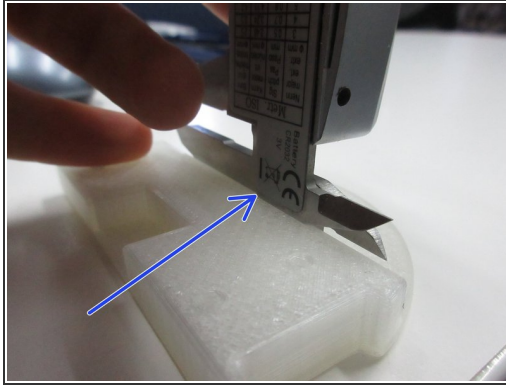
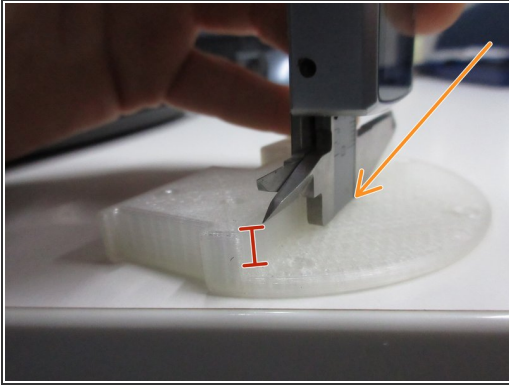
- External features are measured as shown.
- These sections of the jaws have a knife edge,
 - ⓘ Used to measure smaller features with low clearances.
- These sections have a flat edge.
 - ⓘ Used to measure larger features with perpendicular surfaces.

Step 3 — Internal Feature



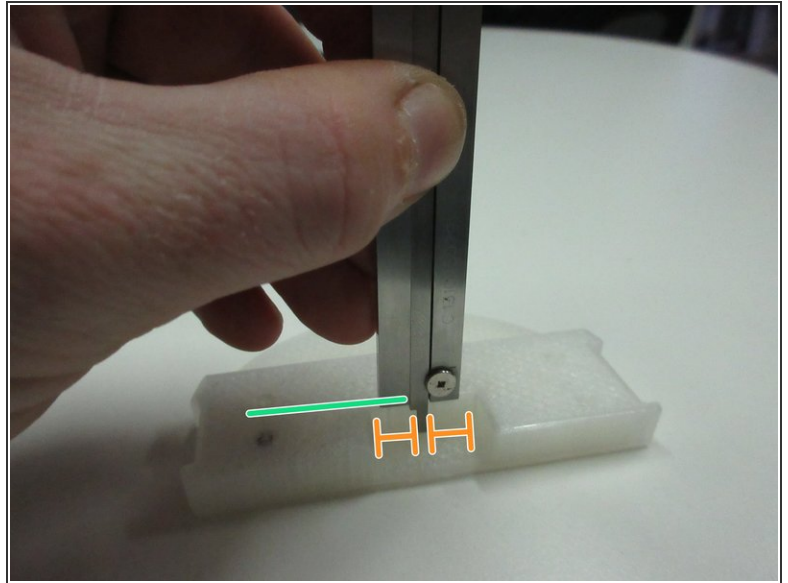
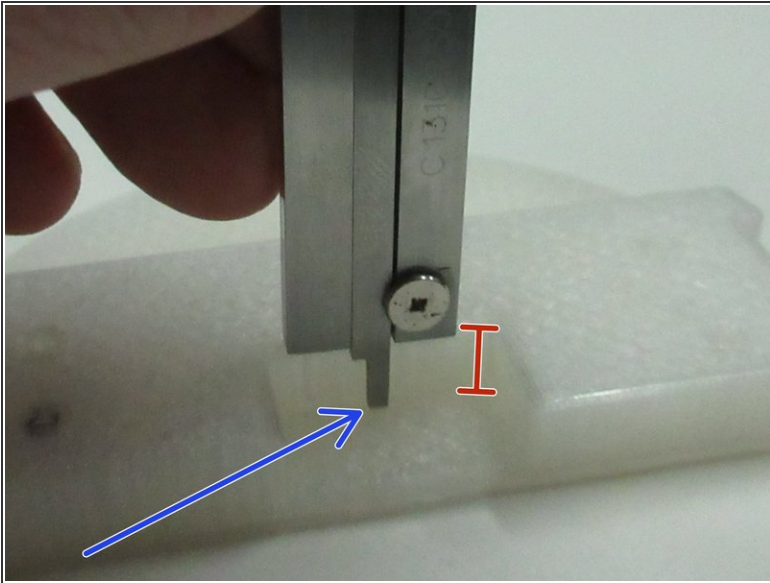
- Internal features are measured as shown.

Step 4 — Height



- Heights of steps are measured as shown.
- Butt the head of the caliper against one surface.
- Butt the head of the slider against the other surface.

Step 5 — Depth



- Depth of holes are measured as shown.
- Position the blade to the center of the hole.
- Hold the end of the caliper flush the surface of the hole.
- Extend the slider until the blade bottoms out the hole.

Happy Measuring