



Why Calibration of Measuring Instruments is Necessary

As science students, we always hear about the calibration of measuring instruments.

Calibration is achieved from a comparison between the standard or known measurement and measurement by your instrument. Normally, the accuracy of the standard should be many times more than the device to be tested. It is important to note that the standard device should be at least 3 times more accurate than the test device. **Total Calibration** is working tirelessly to make sure that that your instruments are accurately calibrated. Therefore, if you are looking for [pressure calibration NZ](#) or Thermometer calibration NZ, it is your first choice.

Objectives of Instrument Calibration

Generally, there are two main goals of instrument calibration. To find out the accuracy of any instrument and evaluate the traceability of the measurement made from that instrument.

Another purpose of calibration includes repairing the device if it is not calibrated or is out of calibration.

To understand the process of calibration, let's take the example of thermometer calibration. In this case, the accuracy of temperature measurement is the single most important factor for calibration. Its calibration is can be performed in two ways. First by comparing its reading with a well-calibrated temperature measuring device. In a 2nd way, we can calibrate it by using an ice-water bath or boiling point of water.

Why Calibration is Necessary?

Coming toward the main point of discussion, why calibration is so important? It is a well-known fact that the accuracy of any measuring device degrades with time. There are many reasons behind this change in accuracy including wear and tear and manufacturing faults. The inaccurate measurements provided by these instruments are dangerous in certain cases. In this case, you need to purchase the devices again or calibrate them. In order to restore their accuracy, calibration is the best way forward.

When to Calibrate Your Measuring Device?

There are various reasons to calibrated your measuring device. However, three main reasons are as below:

- After a certain period, usually monthly or annually, calibration is performed. Sometimes, quarterly calibration is also recommended depending on the measurement device.
- Recommendations of the manufacturer also play a vital role in deciding the timing of calibration. Some devices need more frequent calibration as compared to some other

manufacturer's devices.

- Go for calibration if your device has faced any mechanical or electrical shock.
- Calibration is also required if your device is brand new and you have doubts over its measurements' accuracy.

Where to Go for Calibration in New Zealand?

Are you looking for device calibration in New Zealand? Multiple companies are offering calibration services. Among the best of all is **Total Calibration**. It is an experienced company based in Auckland. The best thing is they are fully New Zealand-based and offer their services in all cities of New Zealand. They provide services for any size of organization with tailor-made solutions. So, it doesn't matter if you are looking for Pressure Calibration NZ or [Thermometer Calibration NZ](#), contact them for the best services.