UNCERTAINTY

Uncertainty in a measurement quantity is a result both of our incomplete knowledge of the true value of a measured quantity and of the factors influencing it. There are many possible sources of uncertainty in measurement that include but not limited to:

- Environmental Conditions
- Test Methods
- Measurement Equipment
- Traceability
- Resolution
- Precision
- Reproducibility
- Repeatability
- Accuracy

$$s_x = \sqrt{\frac{\sum_{i=1}^{n}(x_i - \bar{x})^2}{n-1}}$$

$n =$ The number of data points

$\bar{x} =$ The mean of the x_i

$x_i =$ Each of the values of the data

OTHER DISCIPLINES:

- Dimensional (Length)
- Volume
- Pressure
- Temperature

CONTACT US

Power Lane, Ministry of Works Compound, Belmopan

Tel: (501) 822-0446/0447
Hotline: 0-800-283-5587
Email: bbs@btl.net
Website: www.bbs.gov.bz

INDUSTRIAL METROLOGY

Belize Bureau of Standards

METROLOGY COMES FROM THE GREEK WORD METROS THAT MEANS TO MEASURE, AND LOGOS WHICH MEANS THE STUDY OF.

PURPOSE

Industrial metrology must ensure the adequate functioning of measurement instruments used in industry, in production and testing process, for ensuring quality of life for consumers.

CALIBRATION

Calibration is the activity of checking, by comparison with a standard, the accuracy of a measuring instrument of any type. It may also include adjustment of the instrument to bring it into alignment with the standard.

MASS METROLOGY

On November 16th, 2018 the kilogram was redefined in terms of a constant of nature: the Planck's constant. This means that the kilogram is no longer defined by a physical object and the International (Platinum-Iridium) Prototype is now obsolete. With this scientific breakthrough, all seven of the base units in the International System of Units (SI) are now based on constants of nature. This achievement was possible using a revolutionary apparatus known as the Kibble Balance.