

## World Metrology Day 2018

A message from Fluke Chief Corporate Metrologist Jeff Gust

On May 20, 1875, 17 nations came together to sign the Treaty of the Meter, which established the coordination of the measurement system that is used throughout the world today, now known as the International System of Units (SI). The metric system was the basis of the measurement system used for the agreement, and the first two parameters to be defined were the meter as the standard for length and the kilogram as the standard for mass. The Treaty of the Meter also established an organization to administer and maintain these standards around the world and created the International Bureau of Weights and Measures, (BIPM) which is located just outside of Paris, France.



Today we celebrate May 20 as World Metrology Day, a day where men and women dedicated to metrology, the science of measurement, can appreciate the measurement system that is the basis of all international trade and the precise measurements that have improved our quality of life.

The theme of World Metrology Day 2018 is “Constant Evolution of the International System of Units.” While other measurement units such as length and time have evolved to be defined more precisely by universal constants of nature, the kilogram has been defined since 1875 by a cylindrical object made of platinum and iridium, known as the International Prototype of the Kilogram (IPK) or “Le Grand K.”

However, the measurement accuracy and stability demands of a modern world require a more precise definition for this global standard for mass, preferably one that is based on constants of nature. And now, in 2018 we are finally preparing the way to redefine the kilogram.

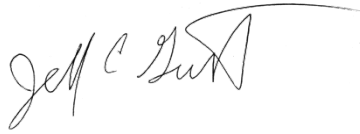


Over the course of 2018, the final results of experiments over the last 20 years are being tallied, and a proposal will be reviewed that will tie the unit of mass to Planck’s constant, a constant of nature used by scientists. In November, a proposal will be heard by the General Conference on Weights and Measures, an international committee that oversees the Treaty of the Meter, regarding the redefinition of the kilogram. If all goes as planned, we will implement this change of definition on May 20, 2019.

Fortive is a company whose purpose is to provide essential technology for the people who create, implement and accelerate progress. Metrology is one of the essential technologies that Fluke, a Fortive company, provides. We build the world’s most accurate commercially available

standards for electrical, temperature, pressure and flow measurement. Fluke's instruments are routinely used by the world's best scientists as part of the evolution for our system of measurement. This would not be possible without the valuable contributions and tireless efforts made by every employee of Fluke Corporation.

Happy World Metrology Day!

A handwritten signature in black ink, appearing to read "Jeff C. Gust". The signature is fluid and cursive, with a long horizontal flourish extending to the right.

Jeff C. Gust  
Chief Corporate Metrologist