

For more information, please visit these websites:

www.kebs.org / www.afrimets.org / www.unido.org / www.worldmetrologyday.org / www.bipm.org / www.oiml.org

KEBS Metrology Laboratories

The metrology laboratories of KEBS commenced in 1980 with calibration facilities for volume/flow, temperature, industrial measurements, electrical (ac/dc), pressure, force and mass measurements. Later more laboratory capabilities in dosimetry (radiation), acoustics and vibration, and photometry were developed. The laboratories are now accredited to the ISO/IEC 17025 standard, offering traceability and calibration in measurements. KEBS is currently establishing their metrology in chemistry laboratory.

Since January 2010, Kenya is a member of the Metre Convention and the BIPM. The KEBS is also a full member of AFRIMETS.

Further, KEBS is also mandated to develop national standards, carry out quality control and inspection of local and imported products, offer training in quality management systems and certify different quality standards. KEBS also carries out certain functions under the World Trade Organisation Agreement on Technical Barriers to Trade (WTO-TBT).
Weights and Measures Department

"Our objective is to provide an opportunity for these future leaders..." -

- Joseph Koskey, Managing Director, KEBS

The Weights and Measures Department

The Weights and Measures Department (also known as Legal Metrology Service) in Kenya was started in 1912 with the enactment of the first Weights and Measures Act. The Weights and Measures Department today is one of the departments in the Ministry of Trade and Industry and is established by Weights and Measures Act CAP 505 Laws of Kenya. The mandate of WMD is as follows:

- ▲ Consumer protection and ensure fair trading by enforcing Weights and Measures Act Cap 513, Trade Description Act Cap 505 and rules made under them
- ▲ Pattern Approvals of equipment intended to be used for trade
- ▲ Investigation and prosecution under the two Acts
- ▲ Workshop Approvals and licensing of people engaging in manufacture, repair and maintenance of trade weighing and measuring equipment.

SI base units

Name	Unit symbol	Quantity	Symbol
meter	m	Length	<i>l</i> (a lowercase L)
kilogram	kg	mass	<i>m</i>
second	s	time	<i>t</i>
ampere	A	electric current	<i>I</i> (a capital i)
kelvin	K	thermodynamic temperature	<i>T</i>
candela	cd	luminous intensity	<i>I_v</i> (a capital i with lowercase v subscript)
mole	mol	amount of substance	<i>n</i>

Standard prefixes for the SI units of measure

	Name	deca-	hecto-	kilo-	mega-	giga-	tera-	peta-	exa-	zetta-	yotta-	
Multiples	Symbol	da	h	k	M	G	T	P	E	Z	Y	
	Factor	10 ⁰	10 ¹	10 ²	10 ³	10 ⁶	10 ⁹	10 ¹²	10 ¹⁵	10 ¹⁸	10 ²¹	10 ²⁴
	Name	deci-	centi-	milli-	micro-	nano-	pico-	femto-	atto-	zepto-	yocto-	
Fractions	Symbol	d	c	m	μ	n	p	f	a	z	y	
	Factor	10 ⁰	10 ⁻¹	10 ⁻²	10 ⁻³	10 ⁻⁶	10 ⁻⁹	10 ⁻¹²	10 ⁻¹⁵	10 ⁻¹⁸	10 ⁻²¹	10 ⁻²⁴

Did you know? Measurements are important in all aspects of society: in commerce and industry, health care, environment, science, technology and innovation.

Measurements in Daily Life



- ▲ Consumers need to trust the volume delivered by a petrol pump.
- ▲ Cars and their parts are from one continent to another. We just accept that all the parts will fit perfectly for a smooth safe drive.
- ▲ Your doctor relies on temperature and blood pressure readings, and the results of laboratory tests to make a diagnosis on your health, and to prescribe the best treatment.
- ▲ Weighbridges along the national highways ensure that the weight of trucks can be monitored, as overloaded trucks cause irreparable damage to tarmac roads.
- ▲ A split second can be the difference for an athlete to have a new world record, or not.
- ▲ Do you care to find out whether you pay for the right airtime in your mobile phone communication? Is the billing per second or minute really right?
- ▲ Financial transactions on the stock markets are time stamped, as the exact time is critical to the selling or buying price of the stocks.
- ▲ The calibration of radiation facilities for cancer treatment is critical to ensure you get the right dose of radiation delivered to the right place for accurate treatment.
- ▲ When you buy pre-packed volumes or weights of goods, e.g. a 500 g brick of butter, you always get the same amount.
- ▲ Occupational safety regulations have strict prescriptions to ensure that the right amount and type of light are used.