

Verification is a preventive measure by which instruments are examined to see if they comply with requirements of technical regulations, are of an approved model and are within the prescribed error limits.

The NRCS Legal Metrology department ensures, by means of verification that the instruments used to measure pre-packaged products and goods at the time of sale are correct.

One of the main task of Legal Metrology is to provide consumers with peace of mind and confidence in the knowledge that accurate measuring instruments have been used in the measurement of the goods they have purchased.

The validity of verification certificates is normally limited so those instruments must have markings indicating the expiry date of verification.

The Legal Metrology department is responsible for conducting inspections on all measuring instruments used for prescribed purposes. Instruments are allowed a particular tolerances (Maximum Permissible tolerance) depending on the capacity thereof.

All measuring instruments, including those used by the State for a prescribed purpose, are subject to initial verification and subsequent verification in accordance with the relevant legal metrology technical regulations, unless the measuring instrument is exempted by regulation from initial verification or subsequent verification.

During verification test certified verification standards are used. These standards are calibrated by an accredited calibration laboratory to ensure traceability.

Instruments that are commonly used by consumers include scales and liquid fuel dispensers.

Only verification officers appointed by the CEO of the NRCS and employed by recognised designated verification bodies may perform verifications of measuring instruments.

Scales (Mass Measuring Instruments)

Scales are found wherever the mass of a commodity must be determined including but not limited to supermarkets, butcheries and factories.

The verification process involves preparation for testing, indication check, discrimination (sensitivity), accuracy of testing, eccentricity (corner testing), and repeatability.

Liquid fuel dispensers

A liquid fuel dispenser (LFD) also known as a petrol pump is a measuring instrument consisting of a pump, a meter, and ancillary equipment for the measurement of petrol, diesel and liquified petroleum gas (LPG). LFD's are largely used by filling stations.

Legal Metrology Inspectors have the right to request verification certificates from any filling station using LFD's for trade purposes.

Types of activities or tests done during verification as required are preliminary examination (markings, sealing, indication of results of measurement and hoses), accuracy tests (fast, medium and slow flow rates), nozzle burst, variations caused by back drainage, time delay, backlash, and examination of electronic displays.

