

PREREQUISITES FOR TESTING MEASUREMENT STANDARDS AND EQUIPMENT

All standards and equipment submitted for calibration or tolerance testing should be of good appearance and in good operating condition. It is futile to test and/or calibrate any item that does not meet the generally recognized minimum requirements set forth below. When items received do not meet these qualifications, they should be returned to the submitter for appropriate action.

Mass Standards

Weights and other devices must be free from all foreign matter, such as dirt, rust, concrete, grease, and other adhering substances. Old seals should be removed and plugs loosened unless "as found" values are needed. Spacers in adjustment cavities shall be furnished by the submitter.

Class "C" or Class "F" test weights, 50 pounds or heavier, must be freshly painted with an approved type paint, unless they are in extremely good condition. No painting or touching up should be done by laboratory personnel (unless special arrangements are made).

Cast Iron Weights

Cast iron weights should be cleaned thoroughly with a wire brush. If a weight is covered with numerous applications of paint that is beginning to chip, the weight should be cleaned with paint remover. Do not sand or shot blast or sandpaper cast iron weights. This method of cleaning removes metal as well as paint and could result in the weight being rejected.

Cast iron weights should be freshly painted with a good quality, thin coat of aluminum paint (not an enamel). (See also GLP No. 11).

Stainless Steel or Plated Weights

Stainless steel or plated weights should be washed in alcohol or with detergent and water to remove all extraneous matter. Care should be taken to avoid leaving a soapy film on the weight and to prevent the entrance of water into the adjustment cavity.

Apothecary or Metric Weights

Small weights (up to 100 grams) or weights that are calibrated, should not be cleaned in the field. If cleaning is necessary, it can be done better within the facilities in the laboratory. (See GMP No. 5).

Volume Standards

Test measures must be free from all foreign matter. Dents must be removed, and all leaks repaired. Unless a measure is in extremely good condition, it must be freshly painted with an approved type paint. Gauge tubes, reading scales, and other test measure components must be in working order, and in a reasonable good state of repair.

Small Liquid Measures (Glassware and Nester Sets)

Small liquid measures should be thoroughly cleaned with soap and water and rinsed thoroughly to prevent a soap film residue.

Field Test Measures

If a field test measure has been damaged, all dents should be removed and all leaks should be stopped. Some 5-gallon and smaller measures have plastic sight gauges that yellow with age. These should be replaced as necessary.

All field test measures should be freshly painted using a color appropriate for the intended use.

Balances and Scales

All balances and scales should be cleaned and in working order when they are submitted, with oil in dash pots. Any loose parts should be tightened and broken parts replaced.

Tank Trucks

All tank trucks shall be clean on the exterior. All safety valves must be operating properly when the truck arrives. All markers shall be loosened. Since this work is scheduled by appointment, trucks must arrive at the appointment time. Truck drivers or customer-designated personnel shall assist laboratory personnel as requested.