

Submission Requirements - Cast Iron Weights

All cast iron weights submitted to the Pennsylvania Standards Laboratory for calibration must be properly prepared according to the following requirements:

1. Cast iron weights must be cleaned and free of all foreign matter prior to coming into the laboratory. Any of the following examples could result in your weights being rejected for calibration: dirt, rust, grease, concrete, asphalt, and any other adhering substances.
2. All weights must have **legible** serial numbers.
3. If painting is desired, please follow the guidance from NIST below.

GLP 11 (2019)

Good Laboratory Practice for Painting Cast Iron Weights

Large cast iron or steel weights should be painted both for their protection and to preserve their mass integrity. Unprotected weights are subject to corrosion. Furthermore, when corrosion is present, the extent and any changes resulting from it may be difficult to estimate.

Thin even coats of aluminum paint are recommended for this purpose. Spray applications are best if large weights or many small weights are to be painted. In preparation for painting, a weight should be cleaned, and loose scale should be removed using a wire brush (DO NOT remove old paint and corrosion by means of sand blasting or pressure washing. Severe damage may result.). The painting should be done before the weights are calibrated, unless arrangements are made to obtain "as found" values. If "as found" values are desired, two calibrations may be required (one before painting as the "as found" values and one after painting and after any adjustments as the "as left" values).

Painting should be done in an area reserved for this purpose, or at least in a place which is removed from laboratory measurement operations. Painting operations must follow applicable safety standards with appropriate Safety Data Sheets available and using appropriate Personal Protective Equipment (PPE). The weights should be protected from dust or dirt contamination while the coating is drying.