



Maintaining Accuracy & Precision of Your Pipettor

For maintaining accuracy and precision even through repeated pipetting regimes, pipettors should be calibrated at periodic intervals. The interval at which a pipettor needs calibrating depends on several factors:

- The skill and training of the operators and the care with which the pipettors are used.
- How intensively the pipettors are used.
- The type of liquid dispensed by the pipettors. Volatile liquids or corrosive liquids may emit vapors or come into contact with metal pistons, springs, seals and O-rings.
- The accuracy and precision required by the pipettor. Pipettor applications that require superior accuracy also demand more frequent calibration.
- There is no absolute for calibration intervals but each institute or organization should produce their own risk analysis/calibration requirement document. A pharmaceutical company manufacturing drugs or a undertaking a clinical analysis of specimens will have more stringent requirements than a school chemistry class for example.
- Under “normal” conditions, most pipettors can be calibrated semi-annually (every six months) and provide satisfactory performance. Institutions that are regulated by the FDA or GMP/GLP regulations will benefit from quarterly calibration. Very critical applications may require monthly calibration. Many laboratories will undertake weekly “checks” on a balance as well, but even this needs doing carefully. Clearly these are general guidelines.
- Many pipettor calibration companies will offer varying levels of service/calibration, depending on the operators/institutes requirements. For example:
 1. A basic calibration often used by teaching & university labs with broad specs.
 2. As above but supplied with a basic calibration certificate.
 3. Regulated laboratories which require data point results with pass/fail status according to the manufacturers or operator’s requirements.

Each pipettor sold by Globe Scientific is calibrated at the time of manufacture. Regardless of the date of manufacture and factory calibration, we guarantee that calibration upon receipt of initial purchase. Recalibration beyond that will be depend upon the factors listed above and will be the responsibility of the user.