

How does FGIS ensure continued accuracy and consistency of Official moisture tests?

- **Calibration:** UGMA reference system aligned to agree with USDA Air Oven method.
- **Model Alignment:** Manufacturers' standard instruments verified/adjusted to agree with FGIS' UGMA reference system for all grain types.
- **Standardization:** Individual instruments verified/adjusted to agree with manufacturers' standard instruments (during production) and FGIS' standard instruments (official check testing)

Calibration

- FGIS performs Annual Moisture Calibration Study to assess and maintain close agreement between Air Oven Method and UGMA master system.
- Approximately 1000-1200 samples representing all growing areas tested each year.
- UGMA Unifying Parameters (calibration numbers) are adjusted to optimize accuracy over 3-5 crop years.

Model Alignment

- Manufacturers' Production Master instruments, FGIS's Standard instruments, and UGMA Master system are tested side-by-side twice a year to verify alignment.
- Same 1000-1200 samples are tested on standard units of UGMA-Compatible instruments as well as UGMA Master system.
- Alignment between standard units of UGMA-Compatible models and UGMA Master system is verified and adjusted if necessary.

Standardization

- Production instruments are individually aligned to agree with manufacturers' Production Standard instruments during manufacture or service.
- All Official UGMA instruments are verified twice per year via the Official check test process.
 - Verify correct calibrations installed.
 - Verify instrument scale accuracy (+/- 0.5 g)
 - Verify instrument moisture measurement accuracy (+/- 0.15 %M for medium moisture HRWW at room temperature).
- Commercial instrument performance verified by
 - State Weights and Measures (NTEP) testing programs
 - Commercial performance verification programs