

## Moisture Meter Accuracy in Kansas

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This paper provides a brief overview of the issue of moisture meter accuracy in Kansas. To best maintain quality, it is essential that grains be both harvested and stored at safe moisture levels (temperature is also a key factor in grain storage). Often though, producers choose to harvest crops at moisture levels above that for safe storage<sup>1</sup> in order to avoid weather related harvest losses and other events that might reduce yields. In these situations, farmers must choose to dry and condition the grain on-farm or deliver the grain to the elevator or buyer at levels above what they will normally accept, often incurring a “discounted” or “shrunk” price or a “drying charge.” For example, 15% is often considered an industry accepted moisture level for corn, with a discount/shrink of 1.4% being applied to the bushels delivered for each 1% above 15.0%.

In addition, anecdotal evidence suggests that there are times when moisture readings from elevator to elevator will vary quite significantly for virtually the same load of grain (note that time differences within the day and sampling differences can also play a part in these discrepancies).

Clearly, moisture-based discounts and drying charges can be costly to farmers and consistent and accurate moisture level measurement is vital to the grain industry in Kansas. Currently though, many companies that sell moisture meters also offer services that check or certify their accuracy but to date there is no state managed program assuring the accuracy of grain moisture meters (similar to what is available for scales). Nor is there a statute or directive instructing a state agency or other entity to test the accuracy of grain moisture meters.

KFB Policy though, is emphatic in our support for state agency-based inspection and testing of grain analyzers used for payment. KFB policy, AG-25, paragraph six states, “We support legislation requiring the Kansas Department of Agriculture to establish rules, regulations, specifications and standards for inspection of grain analyzers used in commerce in the State of Kansas.”

In several states, the responsibility for inspecting and testing the accuracy of grain moisture meters is undertaken by the state’s weights and measures personnel. According to Kansas Department of Agriculture website, Weights and Measures is a division within KDA and their inspectors “test all kinds of commercial weighing and measuring devices. They test scales used in grocery stores, grain elevators, livestock sale barns, pawn shops and other locations. They test gas pumps and meters used to sell chemicals or to sell propane to home owners. They check packages containing edible and inedible products to ensure that the consumer receives the quantity stated on the label. They even verify that in-store scanners scan the correct price. Essentially, all consumer goods are subject, in one way or another, to the weights and measures law.”

In 2008, both the KFB Wheat and Feedgrain/Oilseeds Advisory Committees forwarded identical recommendations for Board Action: **To more aggressively pursue our current policy (AG-25 paragraph 6) with regard to developing state approved regulations/standards for moisture meters used for testing grain moisture.** These recommendations were accepted by the KFB Board and forwarded to staff but to date, staff efforts have not succeeded.

To achieve this in Kansas would potentially require that a statute be written or rules be promulgated by the Secretary of Agriculture to establish the necessary specifications and guidelines. More importantly though, the division of Weights and Measures would require the allocation of adequate equipment and personnel in order to fulfill these added responsibilities.

<sup>1</sup> **Maximum Recommended Moisture Contents for Storage with Aeration (Source NDSU).**

	Short term	Long term
Corn	15.5 %	13 %
Sorghum	13.5	13
Soybeans	13	11
Oil Sunflower	10	8
Wheat	14	13