Alpha Acid Calibration Curves- For Increased Accuracy in Hops Moisture Reading By: Kishor Duwadi, Account Manager

Knowing alpha acid % helps to increase the accuracy of your hops moisture measurement. analysis using Moisture the widely used conductance sensors are based on the change in electrical conductivity according to moisture present in a material. Hops are a plant with several different varieties and will have different behavior of moisture retention or rate of moisture loss on drying among the varieties. Our FLH meter which also uses the conductance-type sensors takes into account of this variability and comes with the FLH Humimeter - Hops Moisture Meter additional feature of alpha acid based calibration



curves. In the FLH meter, the calibration curves for moisture measurement are available to adjust for 4%, 10%, 15% and 20% alpha acid levels.

The alpha acid adjustment helps to increase moisture accuracy by around 2-3%. You may have data on what alpha acid levels are usually in your tested hops varieties? If not, check for general levels from the list here. Based on this, you can choose the closest alpha acid calibration curve on the meter while measuring the moisture content of that specific variety. So, knowing the alpha acid content is a plus point and allows you to get the highly accurate moisture readings!





FLH Hops Cone Sensor

In addition to the built-in calibration curves, the FLH also offers a superior design of sensors unlike any other hops meter in the market. The FLH utilizes 2 main sensor types. The Conductance probe shown above is great for tight bales or pellets but for loose cones most moisture sensor types are problematic. The Umbel Sensor pictured to the left is a special design that compresses the cones to give repeatable and accurate readings. These rugged and high accuracy sensors when combined with our tables for alpha acids gives hops moisture analysis beyond compare for a consistent measurement of your samples. With the

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use of our interchangeable sensors, <u>FLH meter</u> can be used to determine the water % and temperature of loose hop cones, bales, hops equilibrium moisture content, air humidity in a kiln or in a conditioning chamber or can be used for long term recording of temperature and climate

data.

Here are the links to the <u>FLH meter</u>, sensors and optional accessories (Click on the products to go to our website). Feel free to check with us for your specific applications, feature details and updates:

FLH Humimeter Moisture Meter (Sensors required)

LogMemorizer data recording and analysing PC software (Optional)

(data recording producing reports etc., Used with HM-13157-USB type meter)

<u>FLH Insertion probe stainless steel 30 cm</u> (for hop bales, also for measuring hay & straw bales)

Calibration Test block for FLH insertion probe (Optional)

FLH hops umbel sensor (for loose cones moisture measurement)

Calibration test block for FLH umbel sensor (Optional)

FLH humidity and temperature sensor for ambient air monitoring

(measuring RH in drying chamber/room, 0-100% RH)

(Also available: Sintered stainless steel sensor cap for # <u>HM-12032</u> at an additional cost of \$40.00 US- if using it constantly in a dusty environment)

Plastic case for FLH Kit

