Kett

SCIENCE OF SENSING

Wood Moisture Testers

Wood Chip Moisture Tester
Model MT-200

For improving combustion efficiency of fuel wood chips

Wood Chip Moisture Tester **Model** MT-200

Woody biomass power generation. This is noteworthy renewable energy. Various types of woods such as timber from forest thinning and construction debris are used as fuel wood chips for power generation, and their moisture contents are diversified. The moisture contents of wood chips are directly related to a heat value, ignitability, and combustibility which significantly affect the power generation efficiency of a boiler, and therefore, the appropriate moisture control of wood chips is required. The over-dry method has conventionally been used to measure the moisture contents of wood chips, but this method has some major difficulties such as lack of quickness and necessity of special device.

With this device, "Wood Chip Moisture Tester MT-200", moisture contents can be measured only by inserting the bar sensor into a pile of wood chips. This operation is simple but highly reliable moisture contents can be obtained because calculation is conducted by using newly developed calibration curves* exclusive for wood chips that has been pre-registered.

This is the very one that can play a major role in producing and receiving wood chips and at a worksite such as a chip yard. Kett Electric Laboratory, a specialty company in moisture testers, recommends this product with confidence to you who are wood chip specialists.

*Calibration curve … A formula to convert an electric signal actually measured with a sensor into a moisture value

- ● *Handy type*

  Making this tester handy allows a user to bring it to a worksite and measure moisture contents in real time.

- ● *Quick measurement*

  Pressing the key with the sensor inserted displays a measurement result in a few seconds.

- ● *Wet base indication*

  In many cases, the moisture content of timber is displayed on a dry base, but this device displays it on a wet base.

- ● *Upper limit alarm function*

  The alarm indicating the upper limit of moisture content can be set because of efficient moisture control. If a measurement value exceeds a setting one, a buzzer sounds to call attention.

- ● *Two types of calibration curves are available, one for "cutting chips" and the other for "crushing chips".*

cutting chips   **crushing chips**

Other than the above, up to 13 types of user original calibration curves can be memorized.

User-originated calibration curves creatable

Specifications

Measurement method	Electrical resistance
Applications	Cutting and crushing chips
Measurement range	15 to 55% (wet base)
Measuring Accuracy	Cutting chip: Standard error 5.0%, repeatability 2.0% Crushing chip: Standard error 3.0%, repeatability 2.0% Standard method: Constant weight method at 103°C (ISO18134)
Display	Digital (LCD, minimum displayed digit is 0.1%)
Operating temp. range	0 to 40℃ (no condensation)
Functions	Upper limit alarm setting (15 to 55% or OFF), Moisture value bias adjustment (±9.9%), Auto power off, Average value display, Continuous measurement mode, Calibration curve memory function (13 species)
Power supply	1.5 V batteries (AA alkaline) x6
Power consumption	0.54W
Dimensions and weight	Main body: 110 (W)×705 (D)×50 (H) mm (cable excluded), 1.3 kg Bar sensor: 110 (W)×210 (D)×45 (H) mm (cable excluded), 1.3 kg

Contact