# 6. Calibration curves

| Calibration curve | Product type | Measuring range |
|---|---|---|
| Hay loose storage | loose hay | 8 % - 30 % |
| Empty 1 | free curve for special products | |
| Empty 2 | free curve for special products | |
| Reference | ! Only for testing the moisture meter ! | |

## 6.1 How moisture is defined

The device measures and shows the material moisture content. The moisture content readings are calculated in relation to the material's overall mass:

$$\%WG = \frac{M_n - M_t}{M_n} \times 100$$

$M_n$: Mass of the sample with average moisture content

$M_t$: Mass of the sample with zero moisture content

%WG: Moisture content (in accordance with EN ISO 18134-2)

## 6.2 Notes for comparative measurement with oven-drying method

The device uses a much higher sample quantity than the drying oven (12-fold to 20-fold quantity of kiln-drying method). Furthermore, to determine a more accurate average moisture value in case of inhomogeneous material, there can be effected several measurements within a short time.

Considering a sampling error due to the considerably smaller sample quantity as well as the content of volatile matters (resin etc.) that are not water, the kiln-drying method will practically reach an accuracy of approx. +/- 3 %. Therefore, if the measuring values of these two very different methods of determining the water content are compared, differences of +/- 3 % can be considered to be normal.

In the standard EN ISO 18134-2 is declared that the drying oven method provides no absolute values, but only comparable values.