

## 6. Calibration curves

| Calibration curve     | Wood chip type                          | Measuring range |
|-----------------------|---|-----------------|
| Wood chips            | See "6.3.1 Wood chips"                  | 10 % - 50 %     |
| Coarse wood chips     | See "6.3.2 Coarse wood chips"           | 10 % - 50 %     |
| Industrial wood chips | See "6.3.3 Industrial wood chips"       | 10 % - 50 %     |
| Test block            | ! Only for testing the moisture meter ! |                 |

### 6.1 How moisture content is defined

The device measures and shows a material's moisture content. The moisture content readings it displays 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 Definition wood chip types (in accordance with EN ISO 17225-1)

The given numbers refer to the particle sizes that fit through the round screen openings.

- P16 at least 75 % of the mass between 3.15 and 16 mm
- P31 at least 75 % of the mass between 8 and 31.5 mm
- P45 at least 75 % of the mass between 8 and 45 mm
- P63 at least 75 % of the mass between 8 and 63 mm

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## 6.3 Selection of calibration curve for wood chips

The calibration curves for wood chips depend on the wood type (hardwood, softwood), the size of the chips (size classes according to norm EN ISO 17225-1) as well as on the content of fine fraction.

If you are not sure which calibration curve is the best suited for your material, it is recommended to carry out a reference measurement by kiln-drying (according to EN ISO 18134-2).

Schaller Messtechnik GmbH will be happy to advise you on the selection of the right calibration curve. Please send a picture of your wood chips, placing a measuring tape to the material, to [support@schaller-gmbh.at](mailto:support@schaller-gmbh.at). You will receive a recommendation from us immediately.

### 6.3.1 Wood chips

For wood chips with fine fraction, mainly consisting of hardwood (maximum proportion of softwood of 30 %). For wood chips sizes from P31 to P45. The fine fraction mainly derives from barks, small branches and bushes. See example pictures [47](#) and [48](#).

If your wood chips don't contain small parts (few fine fraction or no fine fraction) or if the wood chips contain a higher proportion of softwood, use one of the following calibration curves.

### 6.3.2 Coarse wood chips

For coarse wood chips without fine fraction, mainly consisting of hardwood (maximum proportion of softwood of 30 %). This curve also has to be used for wood chips with fine fraction, mainly consisting of softwood, with a proportion of softwood (spruce, fir, pine, larch) of 70 % and more. For wood chips sizes from P31 to P63. See example pictures [49](#) and [50](#).

If your wood chips mainly consist of softwood and don't contain small parts (few fine fraction or no fine fraction), use the following calibration curve.

### 6.3.3 Industrial wood chips

For coarse wood chips without fine fraction, mainly consisting of softwood, with a proportion of softwood (spruce, fir, pine, larch) of 70 % and more. For wood chips sizes from P45 to P63. This curve is predominantly suited for measuring wood chips deriving from logs and full trees as well as sawmill residues without fine fraction. See example pictures [51](#) and [52](#).

Example pictures wood chips



Example pictures coarse wood chips



Example pictures industrial wood chips

