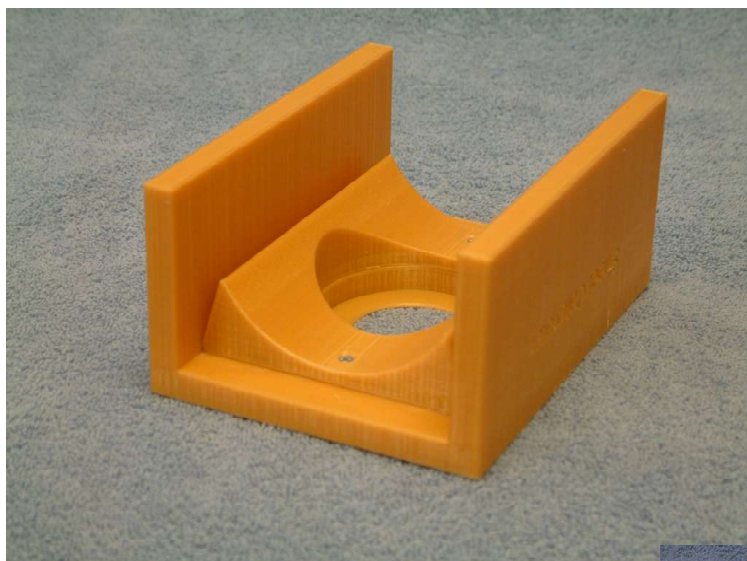


## 1. General

To respond to customer requests, Visilab designed a sheet calibrator facilitating measurement and calibration of paper sheets. The typical problem with AK30 portable infrared moisture meter with thin sheets is to measure them in a repeatable manner. The recommended way has been to use a black Aluminum plate under the sheet and it works well. Not everyone has such a plate available or does not want to carry it. Measuring running thin webs and paper stacks and reels is repeatable and no issues there.

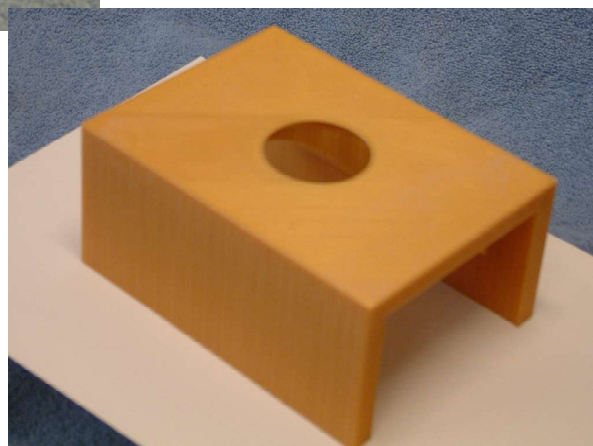
For the MK30R portable microwave moisture meter, the problem is bigger since no plates nor any other material is allowed under the sheet for a distance of 40 - 50 mm. One is supposed to hold the sheet with two hands and then stretch it to remove any wrinkles and air between the sheet and the sensing area. It will require the meter to be placed upside down. Measuring thick stacks or reels is no problem, nor measuring running thin webs.

Therefore, a new plastic Sheet Calibrator was designed to assist in holding the paper in place and offering some tension to remove any wrinkles. Follow the instructions in the following to use this simple device. Whichever meter model and whichever method you use presented here, the guiding principle is always: **Maximize the reading, then you are closest to the real moisture reading.**



Sheet Calibrator with the curved side up. Use this to place a sheet into the slots along the sides, curving upwards.

Sheet Calibrator back side having a flat surface and a big hole. This is the easiest to use and usually givest the best results



## 2. AK30 And the Sheet Calibrator

Use the blue focusing tabs under the meter to align it over the big hole in the Sheet Calibrator. Then place the sheet in between keeping the meter over the hole and place down the meter. Now you can read the moisture reading (use the correct calibration).

You can also use the other curving option (in the following section) which is more useful for the model MK30R. Place the paper as shown there and then place the meter on top of the curved surface and press it a little down for the paper to cover fully the actual measuring area. AK30 is not so critical in this respect as long as the paper is clearly visible by the optical system.



AK30 placed on the Sheet Calibrator flat back side.

AK30 placed on the Sheet Calibrator back side and a sheet in between.



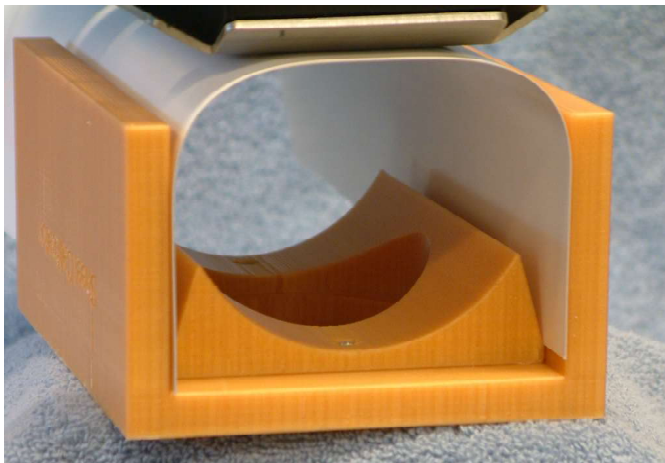
### 3. MK30R And the Sheet Calibrator

Use the asterisk marker on the MK30R front panel to align it over the big hole in the Sheet Calibrator's flat side. Then place the sheet in between keeping the meter over the hole and place down the meter. Now you can read the moisture reading (use the correct calibration).

You can also use the other curving option. Place the paper as shown and then place the meter on top of the curved surface and press it a little down for the paper to cover fully the actual measuring area.

**Using the flat side usually give the best results for all types of paper.**

Always maximize the reading by moving is slightly over the sample to remove air.



MK30R placed on the Sheet Calibrator curved side and a sheet.



MK30R placed on the Sheet Calibrator back side and a sheet. Align the hole and the front panel asterisk