

## Dear Distributors,

Please take a look on our newest features in new moisture analyzers MA 3Y

Moisture analyzer is a laboratory measuring instrument intended to determine relative moisture content in samples of different substances. MA 3Y features 5,7" LCD colour touch panel which provides new possibilities of instrument's operation and presenting measurement results. It features extended databases containing programmable drying modes related to the database of samples. MA 3Y series enables printing and exporting charts presented on its display to a BMP file.



Till now on our website you could find .pdf's with instructions of how to dry specific samples like flour, grains, milk etc. Now, it is enough to enter menu and simply pick specific product. All the drying parameters like temperature, time of drying, heating speed are set automatically. List of ready procedures will contain about 100 profiles.

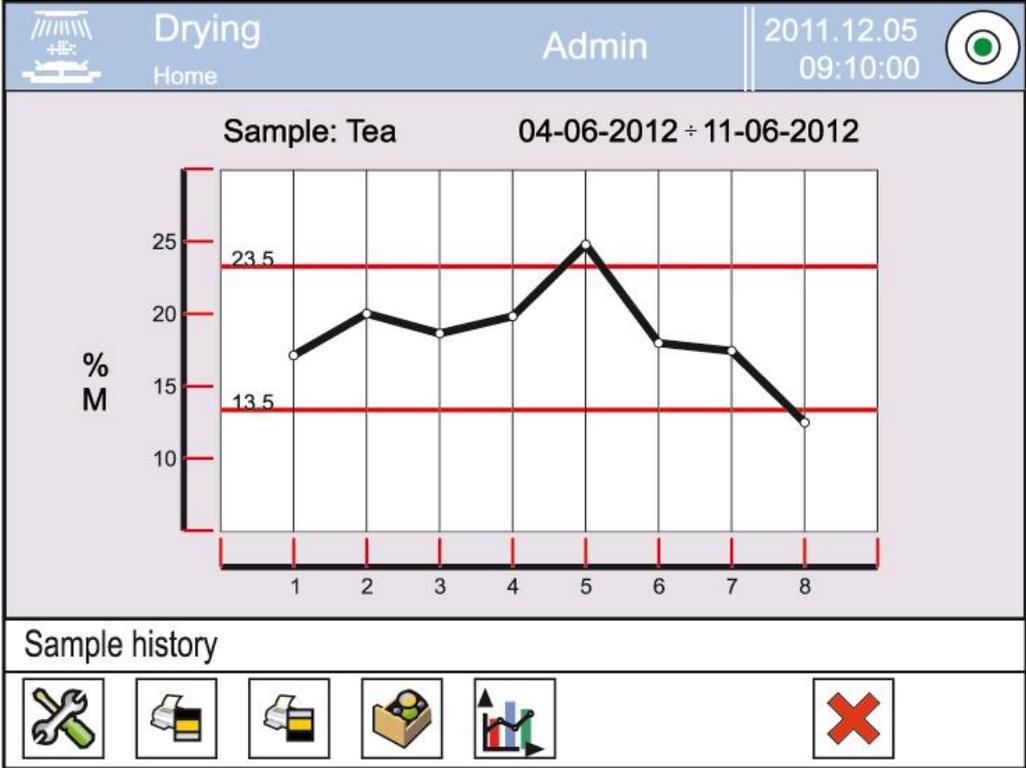
This is main window on the screen. Displays actual result in chosen unit, parameters of sample, all the drying parameters and shows few buttons chosen by user to be a display shortcuts.

The screenshot shows the main window of a drying control system. At the top, there is a header bar with a 'Drying' icon, the text 'Drying Home', 'Admin', the date '2011.12.05', and the time '09:10:00'. The central area features a large digital display showing '15.135 %M' with a progress bar below it ranging from 0% to 100%. Below the display, a grey box contains sample information: 'Program P 01/2012', 'Sample Tea', 'Client Radweg', and 'Net'. A row of icons and parameters follows, including a step chart, temperature settings (160 °C, 120 °C, 100 °C), 'Auto 5', '1 mg', '120 s', a printer icon, '%M 30s', a clock icon, '0:03:25', and '114 °C'. At the bottom, there is a 'Drying' label and a row of seven icons: a wrench and screwdriver, a printer, a printer with a paper roll, a box of samples, a bar chart, a red 'X', and a green checkmark.

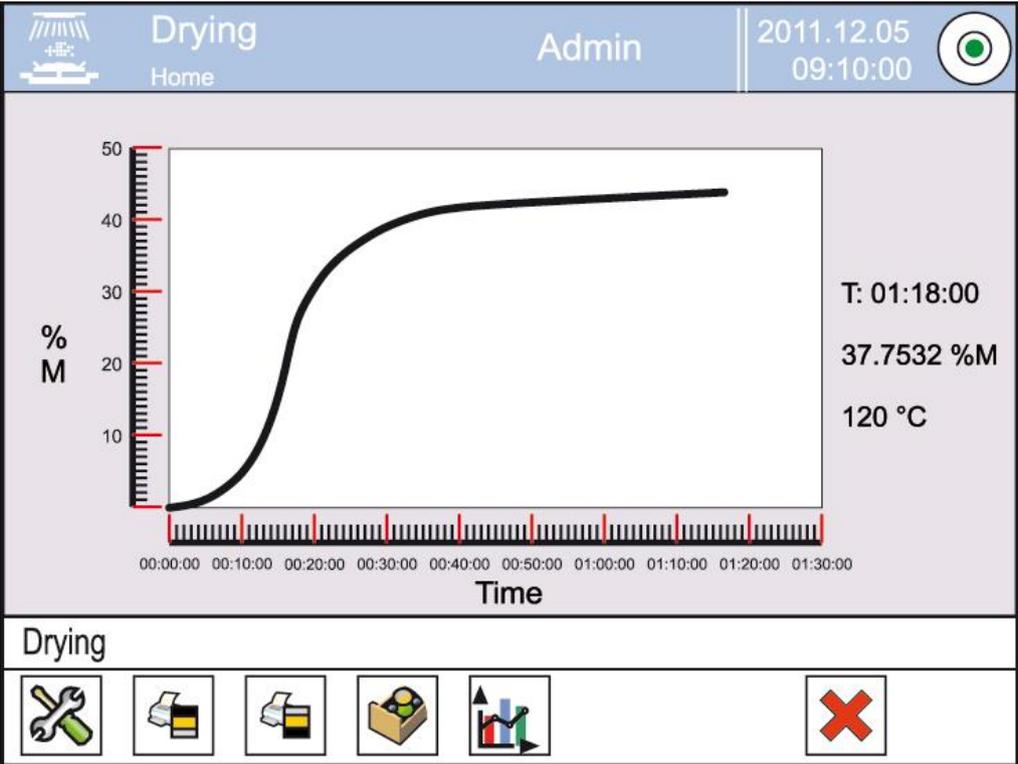
This is how the samples can be found and chosen (or added).

The screenshot shows a 'Samples' menu interface. The title 'Samples' is at the top left, accompanied by a gear icon and a green plus sign icon. On the right side, there are three large navigation buttons: a circular arrow (refresh), an upward arrow, and a downward arrow. The main area contains a list of six items, each with a number, a petri dish icon, and a name: '1 Tea', '2 Coffee', '3 Flour 500', '4 Sugar', '5 Corn', and '6 Butter'.

If you drying same samples repeatedly you are able to monitor how the same samples are changing it's humidity during time (different days, weeks etc). this should be very interesting for producers who buys lots of intermediates for production.

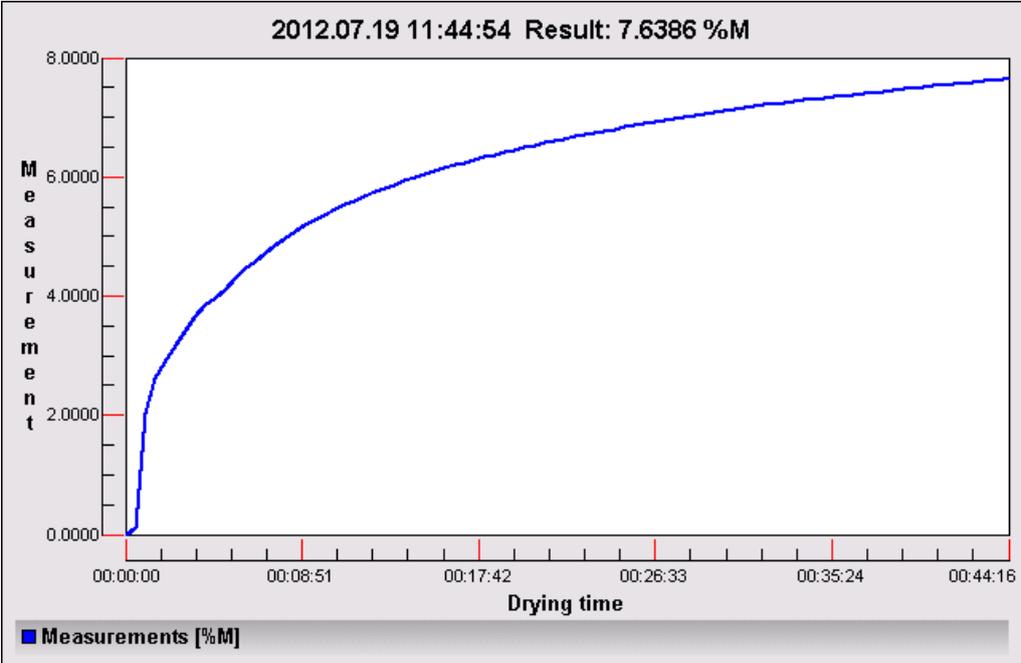


During the drying you can observe graphic interpretation of the results.

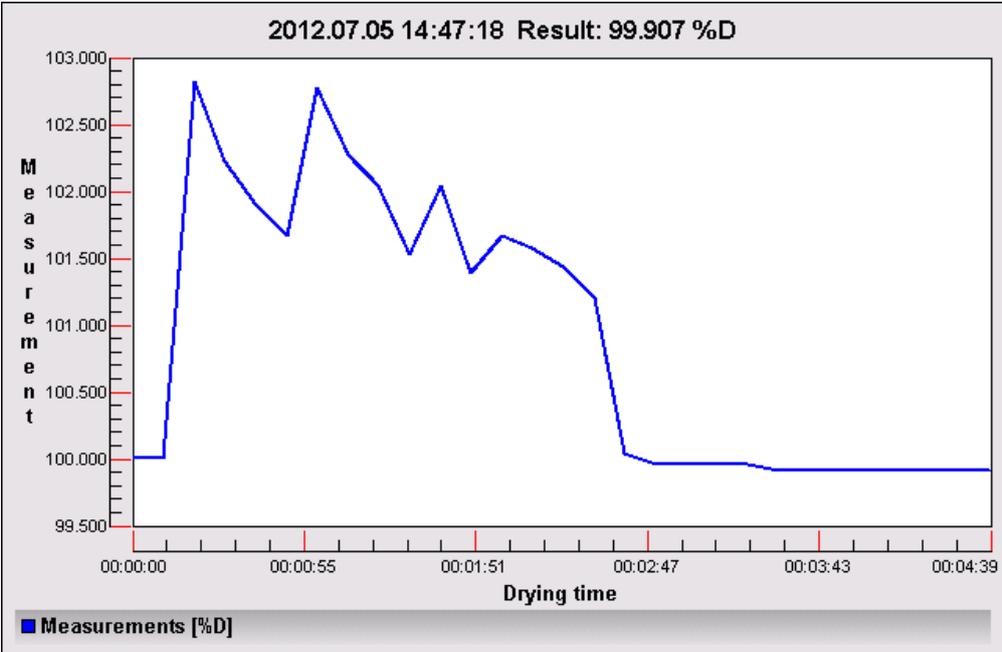


Database of drying results can be checked on the balance screen with all the details that were applied when drying was done. Also we can import them by USB as simple data or as graphic visualizations:

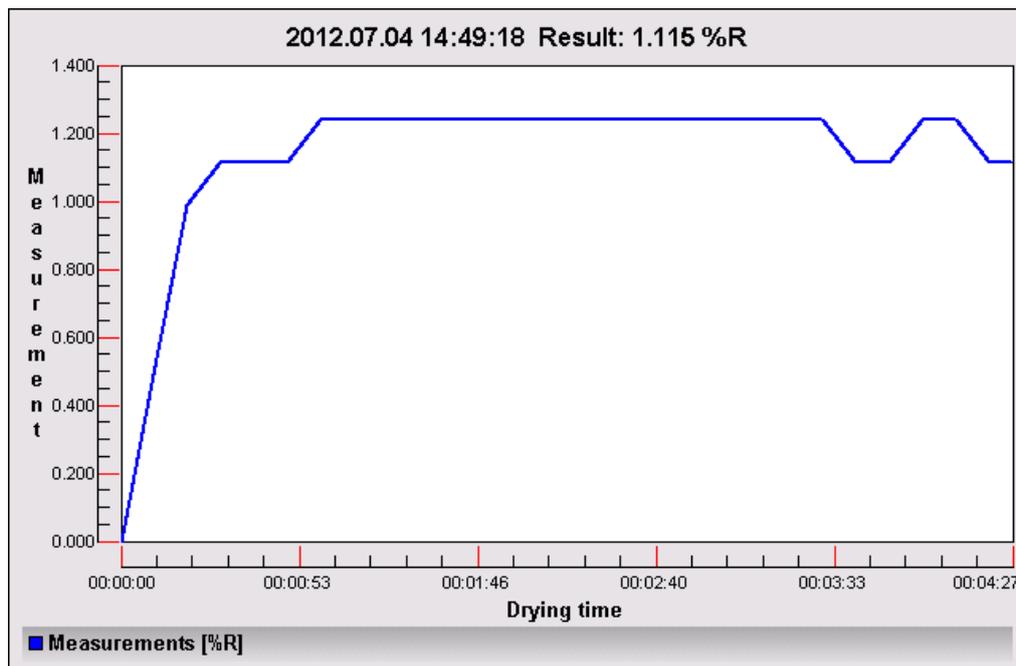
**As a content of Moisture**



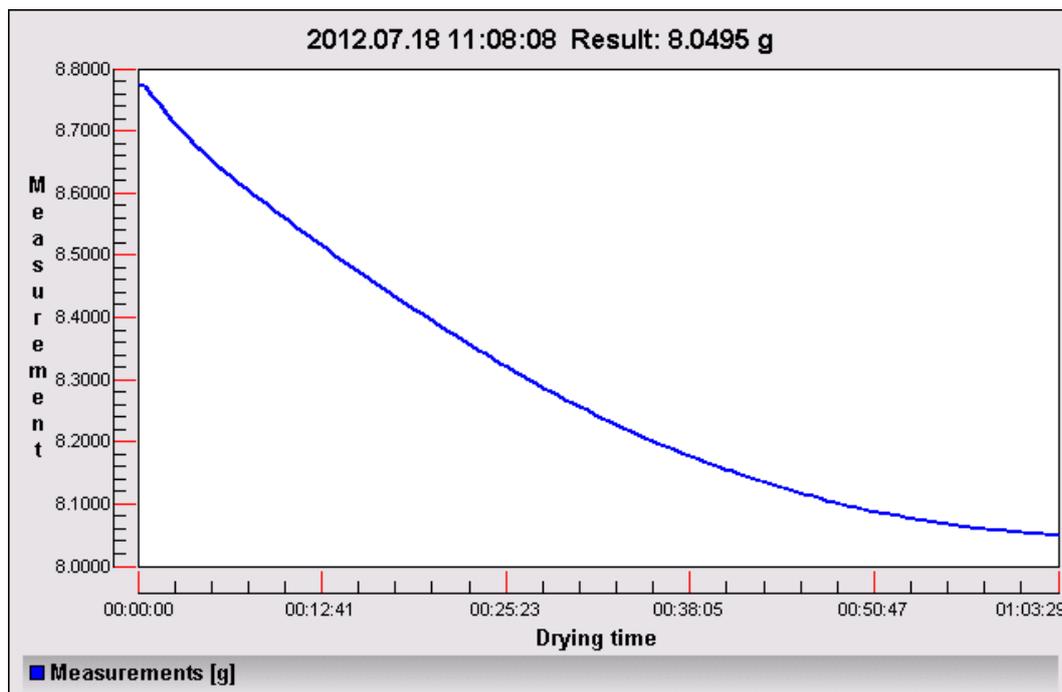
**As a content of Dry mass:**



- As a Ratio between Moisture and Dry:



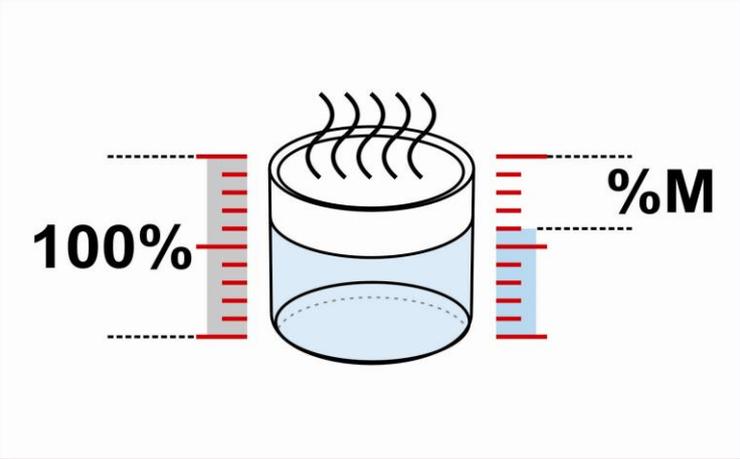
- Or simply in grams (g):



Personalization of instrument's settings is carried out in extended user profiles. Level control is based on LevelSENSING system, RADWAG patented solution, which uses a system of an electronic level. Standard and user defined printouts allow for maintaining documentation complying with GLP/GMP requirements practically in any application.

This is how unit can be chosen – here shown in M (humidity content).

Result

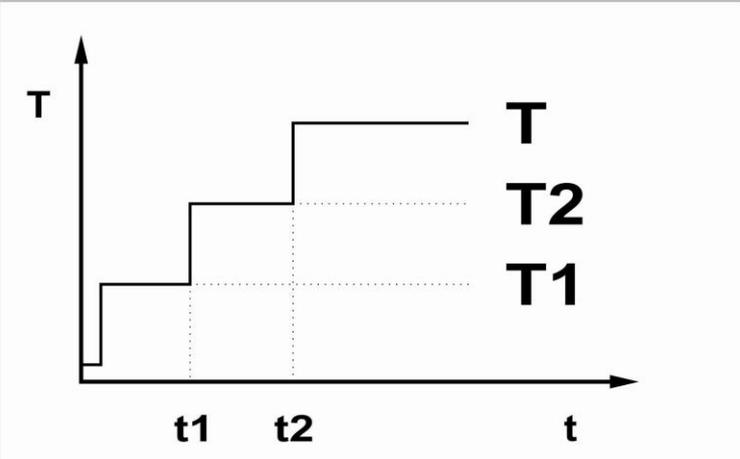


The diagram shows a cylindrical container with a blue liquid inside. Wavy lines above the container represent steam or heat. To the left of the container is a vertical scale with red markings, labeled '100%' at the top. To the right is another vertical scale with red markings, labeled '%M'. A blue bar on the right scale indicates a current humidity level. To the right of the diagram are four control buttons: an upward arrow, a red 'X', a downward arrow, and a green checkmark.

Humidity content

And this is how you can change/select parameters of drying profiles.

Drying profile



The graph plots temperature (T) on the vertical axis against time (t) on the horizontal axis. The profile consists of three horizontal segments at increasing temperature levels. The first segment is at temperature T1, the second at T2, and the third at T. Vertical dashed lines mark the transition times t1 and t2. To the right of the graph are four control buttons: an upward arrow, a red 'X', a downward arrow, and a green checkmark.

Step

## Example of typical drying report (opened in NotePad software):

```
Plik  Edycja  Format  Widok  Pomoc
-----
Start date                2012.07.18
Start time                15:46:13
Operator
Product
Drying mode
Drying profile            Fast
Drying profile parameters 0:05:00 / 120°C
Finish mode              Manual
Start mass                ? 3.3944 g
0:00:30                  0.0059 %M
0:01:00                  0.0147 %M
0:01:30                  -0.0029 %M
0:02:00                  -0.0295 %M
0:02:30                  -0.0501 %M
0:03:00                  -0.0560 %M
0:03:30                  -0.0442 %M
0:04:00                  -0.0177 %M
0:04:30                  -0.0088 %M
0:05:00                  -0.0236 %M
0:05:30                  -0.0059 %M
0:06:00                  0.0029 %M
0:06:30                  0.0118 %M
0:07:00                  0.0118 %M
0:07:30                  0.0206 %M
0:08:00                  0.0206 %M
0:08:30                  0.0088 %M
0:09:00                  -0.0029 %M
0:09:30                  0.0000 %M
0:10:00                  -0.0029 %M
0:10:30                  0.0088 %M
0:11:00                  0.0059 %M
0:11:30                  0.0000 %M
0:12:00                  -0.0088 %M
0:12:30                  -0.0177 %M
0:13:00                  -0.0059 %M
0:13:30                  0.0737 %M

00:13:44 Drying chamber opened

00:13:47 Drying chamber closed

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Status                    Completed
End date                  2012.07.18
End time                  16:00:03
Drying time               0:13:50
Operator
End mass                  3.3936 g
Current result            0.0236 %M
Humidity content          0.0236 %M
```

**Dear distributors, please use this information to show your clients difference between MAC, MAX and MA.3Y moisture analyzers. With those features it is one of most advanced Radwag products and unique device on the worldwide market.**