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Marconi Moisture Meter

The Marconi moisture meter is calibrated ex factory to the "Wheat Act" standard which is based on an oven standard of samples heated at $100^{\circ}\text{C} - 105^{\circ}\text{C}$ for 5 hours.

However the whole UK grain trade switched over at the 1987 harvest to the I.S.O 712 standard, which is currently used by the Intervention Board. Below are the moisture values that relate to the Marconi dial reading based on the I.S.O 712 standard.

I.S.O 712 relates only to cereals and we include the calibration details for Peas, Beans and Oilseed Rape, that are currently being used.

As a quick guide, the I.S.O 712 value is about 0.7% higher than the usual Marconi result.

To avoid confusion we suggest the standard Marconi slide that converts the dial readings to % moisture is removed and stored safely.

Marconi Meter Moisture % for Instrument Dial Readings at 20°C

Instrument Dial Reading	I.S.O 712 Wheat	I.S.O 712 Barley	I.S.O 665 Oilseed Rape	I.S.T.A Peas	I.S.T.A Beans
26	14.5	13.5	7.0	13.9	
27	14.7	13.7	7.2	14.1	
28	15.0	13.9	7.4	14.2	13.8
29	15.2	14.1	7.6	14.4	14.0
30	15.4	14.3	7.8	14.5	14.1
31	15.6	14.5	8.0	14.7	14.3
32	15.9	14.7	8.2	14.8	14.5
33	16.1	15.0	8.4	15.0	14.9
34	16.3	15.2	8.6	15.1	15.2
35	16.6	15.4	8.9	15.2	15.4
36	16.8	15.7	9.1	15.4	15.6
37	17.1	15.9	9.4	15.5	15.8
38	17.4	16.2	9.6	15.6	16.0
39	17.6	16.4	9.9	15.8	16.2
40	17.9	16.7	10.1	15.9	16.3
41	18.2	16.9	10.5	16.1	16.5
42	18.5	17.2	10.8	16.2	16.7
43	18.8	17.5	11.1	16.3	16.9
44	19.1	17.8	11.4	16.5	17.0
45	19.4	18.1	11.8	16.6	17.3
46			12.1	16.8	17.6
47			12.5	17.0	17.9
48			12.8		18.2

<u>Temperature Correction</u> The results above are at 20°C. To correct for temperature add 0.5% to the value for each 5°C below 20°C. Subtract 0.5% to the value for each 5°C above 20°C.

Please Note:-

- Incorrect or unrepresentative sampling is the major source of error
- Ensure the meter is serviced regularly, with good batteries
- If using ground samples (cereals and pulses) use a hand grinder do not use an electrical grinder
- Most meters are only accurate to $\pm 1.04\%$ so an average of a series of results is most appropriate
- Ensure the correct temperature (of the ground material, not room temperature) or variety correction factor is being used