

The EggScale

from

INCUBATOR WAREHOUSE.COM

Specifications:

Capacity: 500g

Accuracy: .1g

Units: g, oz, dwt, gn

Power: 2 x AAA batteries (included)

Operation temperature: 50-86 °F or 10-30°C

Buttons:

1. Power button = I/O
2. Units = M
3. Tare = T

How to operate the EggScale:

1. Place the EggScale on a level flat surface
2. Turn on the EggScale by pressing the power button
3. Wait until the scale reads 0, 0.0, or 0.00 (depending on the unit of measurement)
4. Place the egg on the scale
5. Wait until the weight on the display is stable before taking a reading
6. Press the "M" button to switch between units of measurement

Note: If you wish to use an additional tray for weighing objects this scale does support tare weighing. To do this turn on the scale, place the additional tray on the scale and allow the reading to stabilize. Once the reading has stabilized press and hold the tare key "T" until the display reads zero. Then follow steps 4-6 above to weigh item.

How to calibrate the EggScale (optional):

1. Turn on the EggScale by pressing the power button
2. Hold the unit button ("M") down until the display begins to flash and reads "CAL"
3. Press the unit button ("M") again and the screen will read a standard test weight you will need to put on the scale.
4. Put the required test weight on the scale and wait 3 to 4 seconds and the screen will show pass.
5. Remove the weight from the scale and press the power button (I/O) to turn off the scale. Calibration is now complete.

Note: If an error has occurred during calibration the display will "FAIL". If this happens repeat steps 1-5. The scale only needs to be calibrated if you feel that the reading is inaccurate.

Measuring Humidity by Egg Weight Loss During Incubation

Terms:

Beginning Weight (BW): This is the weight of the egg before it has started incubating

Incubation Period (IP): This is generally the period of incubation before the hatching period or the lock down period and is generally the total incubation time minus three days.

Day of Incubation (DI): This is any given day of the incubation cycle. For example: It is day 5 of incubation.

Total Weight Loss (TWL): This is the amount of weight lost from the beginning to the end of the incubation period. The incubation period does not include the hatching period which is generally the last three days of the entire incubation time of the egg.

Daily Weight Loss (DWL): This is the amount of weight the egg should lose every day of the incubation period.

Total Daily Weight Loss (TDWL): This is what the egg should weigh at any given day of the incubation period.

During incubation the water in the eggs will evaporate causing the eggs to weigh less by the time the eggs hatch. Most eggs should lose approximately 12-14 percent of their weight from the beginning to the end of incubation

Follow these steps to determine humidity by weight:

1. Number your eggs you are weighing with a pencil so you can keep track of the weights
2. Use the Egg Scale to weigh the eggs before placing them in the incubator to determine the beginning weight and keep track of the weights
3. To determine the total target weight loss for the total incubation period follow this simple formula: $TWL = BW - (BW \times 0.13)$
Note: The generally accepted average percentage of weight loss for most species is 13 percent (0.13)
4. To determine the daily target weight loss of an egg follow this simple formula: $DWL = (BW \times 0.13) / IP$
5. To determine the target egg weight at any day of the incubation period follow this simple formula: $TDWL = BW - (DWL \times DI)$

Eggs can be weighed daily using the EggScale if desired but it is not necessary. However, it is important to always wash your hands before handling the eggs. If the weight of an egg does not change or changes very little over a period of time the egg is either infertile or the embryo has died. If the eggs are losing some weight but the weight is still high the humidity is too high, if the eggs are losing too much weight then the humidity is too low. When adjusting the humidity inside the incubator avoid making drastic changes. To adjust the humidity inside the incubator follow the instructions found in the operators manual for your incubator.

Note: During the hatching period or the last three days of incubation, it is important to raise the humidity level inside the incubator to 60 percent or higher. This is to help lubricate the chicks inside the shell to make it easier for them to hatch.

Weight Loss Chart

This chart is an example of how to keep track of the weight loss during incubation. We recommend only weighing a small number of eggs from the same incubator to determine humidity to avoid over handling. To calculate the values for the chart use the steps outlined above.

Egg Number	BW	TWL	DWL	Day 3		Day 6		Day 9		Day 12		Day 15		Day 18	
				TDWL	Actual	TDWL	Actual	TDWL	Actual	TDWL	Actual	TDWL	Actual	TDWL	Actual
1															
2															
3															
4															
5															
6															

Note: It is important to use the same unit of measurement every time the eggs are weighed

One-year Hassle-Free Guarantee

The EggScale is covered by IncubatorWarehouse.com’s One-year Hassle-free Guarantee. If you have any questions or comments please e-mail us at service@incubatorwarehouse.com.