Using your mobile as a powerful tool in your hatchery

A mobile application, most commonly referred to as an app, is a type of software designed to run on a mobile device, such as a smartphone or tablet computer.

Mobile applications frequently serve to provide users with easy measurement and analysis which are equivalent to those provided by dedicated tools. App software is supplied through application stores managed by Apple® or Google®.

 Download on the App Store
 GET IT ON Google Play

Today there are many applications which can be used in hatcheries. In this tip we will introduce some of them.

Angle measurement

To check egg turning angles or ventilation damper angles the mobile device can be used as an angle meter. Angle Meter Pro is available for both IOS and Android, and can even measure angles through a window if necessary.

Converting Units

Convert Units

Convert!!!

Convert Units Plus

Globally, manufacturers give standards for flows, volumes or pressures in different units. The actual units chosen will usually depend on where the supplier is based.

> Depending on the measurement tools or calculation methods actually in use at the hatchery, it is often necessary to convert these values to different units.

These small applications are capable of converting almost all values. There are hundreds of similar programs available for IOS and Android.

Using your mobile as a powerful tool in your hatchery *Continued*

Measuring fan speeds

Strobe Light Tachometer

Strobo RPM Hz LightC

Fan speed checks are an essential part of routine maintenance. These applications use the mobile device's flash light as a tachometer.

To measure fan speed, start the application, set the expected RPM (Revolutions per Minute) value to the target for that machine, and in the dark direct the blinking light towards the fan and observe the fan blades. If the fan looks as if it has stopped turning, then it is turning at the expected RPM value.

If it still looks as if it is turning, alter the expected RPM from the menu and read its current speed. It is possible to multiply the RPM by the number of fan blades for easy reading.

Converting between RH% and F

E+E Humidity Calculator

Many hatcheries have more than one make or age of machine. When recording humidity, some machines use relative humidity % (RH%) and others wet bulb temperature. This tool will convert between the two.

It is also useful if you are calibrating an electronic humidity sensor which is programmed to give a wet bulb reading. Set machine air temperature and expected RH% on the App, which will give a predicted wet bulb reading.

The app can also be useful calibrating machines with electronic humidity sensors, which are calibrated using saturated salt solutions but give the humidity reading as a wet bulb temperature.

For this, you need to tell the app the incubator air temperature in F, and the predicted RH reading from the salt solution. The app will tell you what the wet bulb temperature should be, which you can check against the actual reading on the incubator. If the two are not in agreement, adjust the machine reading until it is the same as the one on the app.

The apps that are available for smart phones include many which are of great practical value. The few that we mention in this tip cover those which are particularly useful in the hatchery and are available at low or no cost to the user.