



### THE INSIDE CHIRP

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# AVIAGEN MANAGEMENT ESSENTIALS



#### **DID YOU KNOW?**

When you set up your incubator, your eggs can give you the best guidance on whether the incubator temperature settings are correct?

Incubator temperature sensors measure air temperature at various places in the machine. For practical reasons sensors have to be sited somewhere they do not get in the way of loading or cleaning. Because of this, they may not always reflect the air temperature that is experienced by the eggs.

Provided that everything is correctly set up, and the machine is well maintained, then the air temperature is a good indicator that the embryo temperatures are correct as well. But if not, the machine temperature may not predict embryo temperature as accurately as you would like it to.

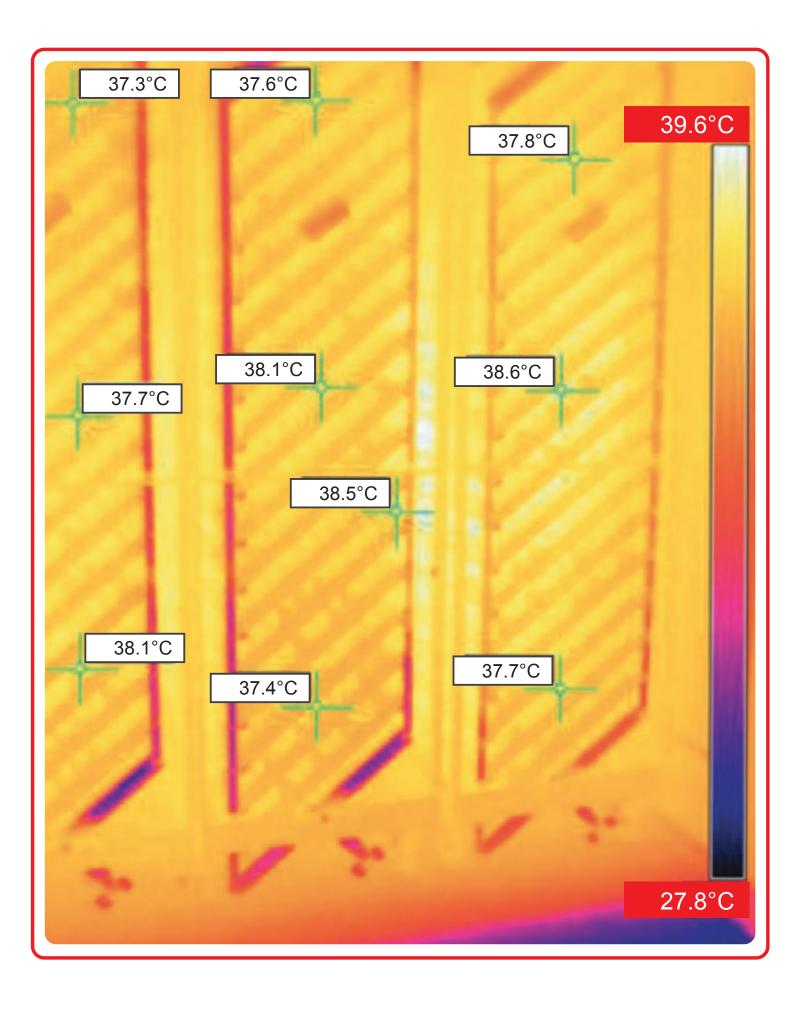
Once the setter has stabilised, it is wise to calibrate the machine sensors. This should be done using an accurate, certified calibration thermometer, every time the machine is loaded (single stage) or monthly (multi stage).

But this only tells you whether the air temperature recorded by the machine sensors is accurate. It may not be at a level which is optimal for the embryos. So, you should also check that your eggs reflect the temperature calibration.

Check the egg shell temperature on day 2 of incubation, when the eggs are up to incubator temperature but the embryo is too small to be producing heat. The eggshell temperatures should all be within 0.1°C of the air temperature in most types of setter.

If they are not, it could indicate something is wrong. (for example worn door seals, sticking solenoids, etc).





#### WHEN DID YOU LAST WATCH YOUR EGGS TURNING?

All hatchery managers are busy and it can be difficult to find time to just observe eggs in your setters.

But, egg turning is essential for good hatchability and the turning angle, turning frequency, and the smoothness of the turn are of key importance. So, make some time to watch your eggs turning:

- Did the eggs turn when you expected them to?
- Did all the trolleys/trays turn?
- Was the turning smooth and gentle?
- Was the turning angle correct on all the trolleys/trays?



Turning angle of 31.6 degrees is too shallow.

Target is 38-43 degrees

Incorrect turning angles, or complete turning failure, are among the most frequent issues we identify on hatchery visits. The impact of mildly suboptimal turning angles on hatch can be subtle, but will include increased levels of early and late dead embryos, malpositions in the late deads and also unabsorbed albumen covering some chicks. If you do not correct turning issues as soon as they are found, it will cost you chicks.

Turning problems will affect embryo development most severely when they happen early in incubation.



Getting the turning angle just right at 42 degrees.



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