

News & Events for
Poultry Producers from

ChickMaster

e-news

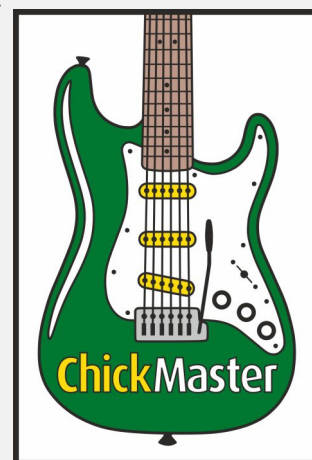
We *ROCKED* the VIV Bangkok

The Southeast Asian market as well as Northern Asia, Central Asia and Australasia include many customers using ChickMaster equipment in their hatcheries. For more than 35 years we have been present in these areas and are honored by the friendships we have made over that time. At the VIV Asia exhibition on March 15-17 we were visited by many old and new friends at our booth. They first came to see the new Avida Symphony with Rock controls. Introduced at the EuroTier and again at the IPPE, now in Bangkok we were pleased to show this fantastic new technology that is going into hatcheries everywhere. *“The amount of excitement and interest in the Avida Symphony and Rock control was huge,”* commented David Buessing, Sales Manager for Southeast Asia.

“I have been traveling this area for many years and this was the most active exhibition I have attended in Asia. We have customers getting Rock controls soon and I was pleased to see how quickly hatchery managers understood the value of this new control system.”

Fred Sharp, Chief Operating Officer of ChickMaster, attended this exhibition for the first time. *“I can see that ChickMaster has many loyal customers who commented about the commitment to service and incubators that produce great results all year long. I also learned from them about Hatchery in Harmony when they explained how the CC3 has improved their hatcheries.”*

We have more than 70 Aria and CC3 Systems operating around the world today with many of them in hatcheries throughout Southeast Asia where high humidity makes it a challenge to control moisture in the hatchery. The CC3 has proven to do just that with energy saving features that nobody else can offer.



Also on display was the new GeMeric 3. With a large installed base of Classic setters and hatchers, many of our customers were excited about the latest generation of GeMeric control upgrades that can improve hatchery results and reduce operating costs. Incubators that still look new after many years of operation can now take advantage of this new technology to adjust to the demands of the industry today.

After three major exhibitions in Europe, USA and now Asia, ChickMaster has *ROCKED* them all and are excited about all the opportunities for 2017.



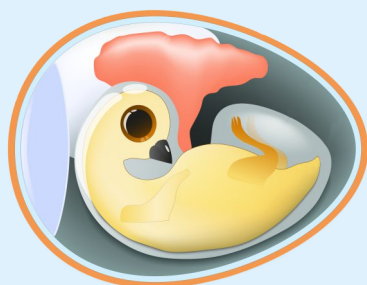
The Influence of the Incubation Environment on the Hatch Window - Part 1

Dr. Carolina Díaz (ChickMaster Poultry Specialist)

The hatch window is defined as the period between the beginning of active hatch of the first chicks and the last chicks in a hatcher, after transfer. When this is formed, a normal graph is observed as a Gaussian function. The hatch window provides information that is useful in determining the optimal duration of the incubation process.

With the hatch window the following can be observed: **A.** The peak of the hatch in relation to the pull time, which allows the optimal incubation time to be adjusted and **B.** The total duration. That helps to determine chick uniformity and quality.

Egg - Environment - Breeder



Factors that influence both embryonic development and the hatch window

The hatch window depends on several factors:

- **The pace of embryonic development**
- **Uniformity of the environment in which the embryos are incubated**
- **Handling of the egg in: breeder farms, cool rooms, transportation, setters, transfer and hatchers**
- **Conditions of the egg: size, storage days and the state of embryonic development upon initiating incubation**
- **Breeders: state of health, age and genetic line**

The traditional method for determining the duration of the hatch window is to open the hatcher and verify the number of chicks hatched at different intervals (Pictured right). This practice allows for good information; yet it is only representative of the exact time in which the chicks are counted, and is also limited to only a few baskets. Furthermore, it takes work and time disrupting the hatcher environment due to opening the door and removing the baskets.

A monitoring system allows for observation of the hatch window without having to disturb the environment and without additional work. Information is obtained in real time, through a wet bulb probe that shows the hatch window after approximately 5% of the chicks have hatched because the humidity in the machine environment increases in measure as the process advances.

Take into account that the embryos don't stop their embryonic development, but reduce the growth rate to "physiological zero" when they are stored in the cool room. Because of this, before the incubation process, the egg should be handled correctly in the breeder farm, in

their cool room (in the case that one exists) and while being transported from the breeder farm to the hatchery (check that the temperature isn't too cold, that there's good insulation in the trailer and monitor the temperature as much as possible during transportation). Also, the equipment of the cool room at the hatchery should be checked to make sure there are no obstructions in the airflow. This should be organized with the eggs classified and marked according to genetic line, the lot and the storage date. Also, the quality of the eggs must be screened to notify the personnel of the breeders in case of any abnormality. Doing the proper procedures prior to incubation helps the eggs to be in a state of embryonic development similar to the beginning of the process.

To be able to obtain good uniformity during the incubation process, having well-maintained machines is of utmost importance. That is why the following should be checked:

- ✓ **State of the Fans** (condition, RPM, cleanliness and position)
- ✓ **Water quality - in the event that cooling is by water** (pipe insulation, pressure, flow, and temperature)
- ✓ **Make sure the machine is properly sealed**
- ✓ **Heating elements should be functional**
- ✓ **Turning angles should be equal and within the suggested range** (besides the turning that the embryo requires, it helps ventilation through the egg mass)
- ✓ **Correct operation of the humidification system to be confirmed**
- ✓ **Calibrate machines**
- ✓ **Check the plenum pressures, to make sure they are correct**
- ✓ **Room environment must be checked** (pressure, temperature and humidity)
- ✓ **Balance the sets** (taking into account the order of the sets in the case of multi-stage machines)



Traditional verification of chicks hatched at different intervals throughout the hatch process

KFC Malaysia Upgrades

In the mid 1980's, KFC Malaysia was founded and built its hatchery with ChickMaster Classic setters and hatchers. Over a number of years, the hatchery expanded with the growth of the business. **Recently KFC Malaysia invested in upgrading its equipment to implement new technologies that can improve hatch results and reduce costs.** With the installation of GeMeric 2 controls they have more precise control over the incubator operation. The results show improved hatch, better chick



quality and a more balanced setter and hatcher with reduced energy consumption.

KFC also implemented other upgrades that are features on new Classics, effectively converting the machines that are over 30 years old to be almost the same as those shipped from our factory today.



These are all simple solutions to install that can be justified in less than a year. We appreciate that KFC Malaysia continues to look for improved efficiency with our unique incubator upgrades.

ChickMaster Participates in World Poultry Show in Dhaka, Bangladesh

During the recent exhibition in Bangladesh, our David Buessing attended and spend time with many of our good customers in that country. Our stand was presented in cooperation with our sales representative, Poultry Consultant and Development Services. We were honored to spend time with Mr. Shah Habitual Haque, the owner of Planet Agro. Planet Agro has invested in a new hatchery with Classic setters and hatchers for incubation, and a CC3 to manage the room environments to achieve a *Hatchery in Harmony*. **In an area with high humidity, the CC3 is able to recover heat from the incubator cooling water system and use that free energy to dehumidify the air in the hatchery.** Also, with 100% fresh air, this allows for greater bio-security avoiding recirculation of contaminated air that is common in standard rooftop ventilation systems.

Poultry Consultants is managed by Mr. Rafique Haque, who has been an agent of ChickMaster for many years. Rafique has established a good working relationship with many of the poultry companies in Bangladesh who today use ChickMaster single and multi-stage incubators and rely on the CC3 to manage the room temperatures and humidity to obtain high quality chicks all year round.



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