
The importance of the correct hatch window

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ABSTRACT

The “hatch window” or “spread of hatch” is the time interval from the first to the last chicks hatching. Monitoring of the hatch window will indicate if chicks are being taken out of the hatcher at the correct time. Hatched chicks that spend too much time in the hatcher dehydrate and lose condition.

Achieving the correct hatch window should have no impact on hatchability, but it will significantly affect chick quality and subsequent broiler performance. If you are a broiler hatchery manager your customers expect you to deliver good quality, uniform chicks and managing the hatch window is an important element in achieving these goals.

The hatch window can be monitored by making simple observations that will be discussed during the presentation. From this monitoring the hatchery will be better placed to decide at what time to set eggs in the incubators. To make the correct decisions, the hatchery will also need to take account of several factors that influence the total incubation period. The major factors are strain of bird, flock age, how long the eggs have been stored before incubation and the season of the year. Incubator temperature, egg size, fertility and pre-warming treatments will also exert an influence on hatch times. This means the hatchery must have a dynamic approach in deciding which batches of eggs to set together and what egg setting and chick take-off times are appropriate in order to maximise chick quality and uniformity.

Newer incubators tend to have more even temperatures throughout the machine and thus narrower hatch windows. Preventative maintenance is essential in helping limit the spread of hatch. For example, worn door seals and water on the floor of the incubators will have a cooling effect on some eggs and this will tend to widen the hatch window.