

Managing the Nipple Drinker Line

Having the right flow rate is the key to delivering the perfect amount of water without spillage and waste. Improper flow rate in nipple drinker lines can decrease performance, reduce profit and contribute to disease and mortality. By properly managing the flow rate, birds will obtain maximum weight gains and the litter will stay dry. Dry litter provides a healthy environment, which improves feed conversion, reduces medication costs and condemnations, and improves livability.

Unfortunately, nipple drinker lines can be quite complicated. Many factors influence the flow rate needed, such as the breed of bird, age, climate, and humidity. As a rule of thumb, the larger the bird is, the more water and greater flow it requires. If the climate is warm, birds will drink more water, and if it is humid, a lower flow rate is recommended due to the excess moisture in the air.

One major factor affecting flow rate is the type of nipple drinker used. High flow nipples with catch cups supply more water through the nipple than the birds can consume, catching the excess water in a cup. Birds are then able to drink from both areas. Standard nipple drinkers maintain the ideal flow from day one through grow out by adjusting water pressure as birds mature. There have also been some relatively new hybrid drinkers that combine an open disc with a low pressure nipple.

Managing the pressure of the watering system is one of the most important tools to keeping dry litter and acquiring the greatest weight gains. Low pressure systems are typically used because they adapt to the changes in birds as they mature. A low pressure system requires increased pressure and line height as the bird develops. It is also important to remember that low pressure systems should never be operated at high pressure, unless you want to end up with more water delivered to the floor than to the chicks.

Drinkers control flow rates by the size of the hole in the drinker body. With standard drinkers, the size of the hole can be varied using metering pins. Metering pins are devices that allow a specific amount of water to pass through. Small variations in size can greatly affect the flow rate, that is why it is extremely crucial to make sure build-up does not occur.

During the summer months, proper management of water lines can greatly influence the outcome of your flock. In the summer, it is recommended to slightly increase water pressure because birds tend to drink more water when the weather is warmer. Periodically flushing the water line is also a helpful tool in keeping the water cool and reducing build-up. Flushing lines approximately twice a day for one minute per hundred feet is the recommendation, but even nominally flushing lines is better than not flushing at all.

A Recommended Guide To Proper Management Of Nipple Drinkers

Pre-Chick Placement

A day before placement, flush lines thoroughly and allow the water to warm before chick placement. Before the chicks are placed, check the barn to make sure that the chicks will not be farther than 1-1.4 m from feed and water. Check the filter cartridge and replace or backflush if necessary. Check the actual nipple lines by triggering all nipples to make sure they are all getting water. Depending on the type of watering system, provide the proper amount of pressure. Level the water lines with the house floor to within 1.3 cm high, then level shavings under water lines. Adjust regulator ball and water line height to day one.

Chick Placement

When placing chicks, place under water lines, not brooders. Check to make sure that the trigger pins are at eye level for the birds and double check to make sure that water is present throughout the watering system. After 48 hours, raise the water lines so that birds are drinking from the bottom of the nipple pin. If the flock is not uniform, adjust nipple height for the smaller birds.

As chicks develop, continually check the nipple line, height and pressure. Adjust the water pressure if needed so that the litter remains dry.

Maintenance

Maintaining water lines is essential to good management. Frequently check for leaky pipes and replace as soon as possible. Leaky pipes create a reduced water flow, which will greatly affect water consumption in the flock. It is equally important to keep the riser tubes clean and use a water meter so that you are able to see the water level easily.

It is also extremely vital to constantly provide clean, cool water to the birds. Sanitization is the best aid in keeping your water clean and reducing build-up. There can be many different ways to sanitize your water and water lines, and depending on the water quality available, the degree of sanitizing may vary. As a general guideline, regulators and lines should be flushed, thoroughly cleaned and sanitized before placing your flock. It is also advised to occasionally sanitize the water lines on a continual basis.

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