

## PRESSURE SETTINGS SIMPLIFIED

This guideline provides a simple and clear procedure for achieving and maintaining optimal litter conditions and thereby providing the birds with the best possible environment for maximum production.

### POULTRY WATERING CONCEPTS.

To achieve optimal litter conditions, the following concepts must be fully understood and appreciated.

1. Water discharge from the drinker is directly affected by column pressure. The higher the column pressure the more water discharged from the drinker when activated by the birds. Conversely lower column pressure results in less water discharged.

2. During the drinking process, birds can only retain in their beaks a certain maximum amount of water.

- If more water discharges from the drinker than can be retained in the bird's beak then this oversupply of water ends up in the litter. The greater the oversupply the greater the width and depth of the wet litter under the drinker lines.
- If very little water discharges from the drinker the birds can easily retain the discharged water in their beaks. With very little or no oversupply of water, litter conditions under the drinker lines are generally dry.



3. Litter too wet leads to ammonia release, unhealthy environment, disease problems, increased condemnation rates and a generally poor performing flock.

4. Litter totally dry may mean the birds are not able to get the water they need for maximum weight gain.
5. The simple goal is to fill the bird's beak during the drinking process but at the same time keep the amount of over supply to an absolute minimum.
6. The key to achieving this goal is to take Litter Readings. Read the litter conditions or change in litter conditions and make water column pressure settings and adjustments accordingly. Turn the column pressure down when litter conditions start to become wet and up when litter conditions are dusty dry.

*Turn over and apply the above concepts in your poultry house in order to achieve the best litter conditions and bird performance.*

# APPLYING PRESSURE SETTING SIMPLIFIED TO PRACTICE.

With the concepts from page one in mind follow the procedure outlined below.

Please note that any and all reference to litter or litter condition refers to the quality directly under the drinker lines and not to litter between the drinker lines. Also note that line height, distance from the floor to the drinker, must be according to the illustrations found in Ziggity's Management Procedures – Broiler Applications.

## Day 1 – Week 1

Adjust column pressure setting to the absolute minimum – no greater than 2 inches or 5 centimeters. Do not change this setting even if the litter is totally dry.

## Week 2 to the end of the Production Cycle

If the litter under the drinker lines is unacceptably damp or wet do not turn the pressure up. Stay with the absolute minimum column pressure settings of no greater than 2 inches or 5 centimeters. Maintain this setting indefinitely until the litter becomes dry under all the drinker lines. When the litter is dry or the surface litter has crusted over dry, then, and only then, start making upward column pressure adjustments.

### Do the following:

1. Select one drinker line as a test line (preferably, the one that generally is the hardest to keep the litter dry directly under the drinkers).

2. Adjust the column pressure 1 inch or 2.5 centimeters higher in the test line. Do not adjust the water pressure higher in any of the other drinker lines.
3. Wait at least 24 hours and note the litter conditions under the test line. If the litter conditions are still dry, adjust the column pressure on all the other drinker lines 1 inch or 2.5 centimeters higher. At the same time adjust the test line an additional 1 inch or 2.5 centimeters higher.
4. Repeat this process until a slight dampness develops under the test drinker line.
5. If this is acceptable dampness turn up the other lines to the same pressure, or if not acceptable, turn down the pressure in the test line by 1 inch or 2.5 centimeters.
6. Maintain these column pressure settings until the litter under all the drinker lines becomes noticeably drier. When that happens repeat procedures 2 through 5 above.

If for any reason litter becomes wet under all the drinker lines, immediately reduce the column pressure by 50%. Wait for the litter to crust over dry and then repeat steps 2 through 5 above.



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