

Why measure chain feeder speed?

- Chain feeder speed determines how quickly feed is distributed.
- Feed distribution time is key to achieving and maintaining flock uniformity.
- Feed must be properly and evenly distributed in a timely manner throughout the house so that all birds can eat at the same time.



The procedure for measuring chain feeder speed

Equipment

1. Timer / stopwatch or watch with a second hand.
2. Plastic ribbon approximately 30 cm (12 in) in length.
3. Measuring tape.
4. Recording sheet.
5. Pen or pencil.
6. Ink marker.



Procedure

Chain feeder speed should be measured at least once a flock, preferably more often, or if there are unexpected changes in feeding behavior with the flock.

Step 1 Locate the feeder track that is closest to the feed hopper and gearing system that carries feed away from the feed hopper when the chain is running.



Step 1

Step 2 Remove any male excluder grill from a small area of the track.



Step 2

Step 3 Tie a piece of the plastic ribbon around a link in the track.



Step 3

Step 4 Make a mark on the edge of the feeder track using an easily identifiable ink marker at the same point as the ribbon is tied. This is to identify where to start measuring distance from.



Step 4

Step 5 Manually start the feed track and at the same time start a timer or stopwatch to time one minute. When one minute is complete, stop the feeder track.



Steps 5 & 6

Step 6 Using the pen or marker, mark where the ribbon has stopped on the edge of the track.



Step 7

Step 7 Using the measuring tape, measure the distance between the points marked on the side of the track.

Interpreting results

Incorrect chain feeder speed can lead to:

- non-uniform feeding;
- a non-uniform flock;
- reduced flock performance and welfare.

Feed distribution around the entire feeding track should not take more than 3 minutes. This will be achieved if the chain feeder speed is 30 m or 90 ft per minute (0.5 m/1.5 ft per second).

Distance ribbon traveled in 1 minute	Speed of chain	Action required
Target (30 m / 90 ft)	0.5 m / 1.5 ft per second	No adjustment to chain feeder speed required, however feed depth along the length of the track must continue to be monitored. If chain feeder speed is correct but feed depth is not even along the entire track, adjust the feed hopper slider.
Greater than 30 m / 90 ft	Greater than 0.5 m / 1.5 ft per second	Monitor feeding closely to reduce effects of feed pile up and overflow; if this happens, reduce chain feeder speed.
Less than 30 m / 90 ft	Less than 0.5 m / 1.5 ft per second	Increase chain feeder speed and ensure feed is correctly distributed before allowing birds access to feed. Running feeders in the dark may help. Replace / check cogs and gears if possible.

Example of a good, unworn cog

