

# We Make In-Bin Drying Easy

Sufficient air flow is necessary anytime you are attempting in-bin grain drying with an Aeration fan.

Ideally the required air flow rate must be kept between 1 and 1.5 cfm per bushel of grain.

As the grain bin is filled, the static pressure required to push air through the grain increases causing the air flow rate to drop.

**WE NEED TO KNOW WHAT THE AIR FLOW RATE IS SO THE BIN IS NOT OVER FILLED!  
Over filling will result in insufficient air flow and potential grain spoilage.**

All aeration fans are accompanied with a manufacturer's "fan curve" . This curve provides the air flow rate that the fan is able to generate at any given discharge pressure.

Currently the farmer is required to measure the static pressure and then reference the "fan curve" to determine an estimated flow rate.

Wilde Ag Ventures has integrated this "fan curve" with a low cost pressure gauge to create a real time air flow indicator.

This innovation allows the farmer to read the instantaneous flow rate directly off the Gauge.

**Warning: This is NOT a Flow Meter. This is a Flow indicator that is only accurate if the Fan is in operation with minimal wear and no restrictions to the Air inlet.**

**For best results the air flow indicator gauge must be installed as close to the air discharge of the fan as possible.**

**FLOW RATES FROM THE GUAGE ARE ONLY ACCURATE FOR THE SPECIFIED AERATION FAN MAKE & MODEL**



**Gauges are to be installed on the transition just down stream from the fan.**

**The 1/4" NPT tapered pipe thread makes installation easy!**

## Use this simple tool to analyse the overall design and competence of your aeration system.

Due to Vibration associated with many old / worn aeration fans we do not recommend installing the gauge directly on the aeration fan. Despite providing accurate readings, fan vibration will reduce the gauge life. Installation directly on the fan will void the 1 year warranty for the gauge.

The below table outlines trouble shooting guidance for your aeration system and points out instances where the gauges will **NOT** be accurate.

Aeration System Problem	Impact on Static pressure	Gauge Air Flow reading
Damaged aeration fan not providing proper air flow.	Low static pressure	Air flow Gauge will read too high
Restricted Air inlet for the fan.	Reduced static pressure reading	Air flow Gauge will read too high
Fans run by GenSet >60 hertz.	Static pressure reading is increased.	Air flow Gauge will read too low. The fan curve on the gauge assumes the fan is operating at 60 Hz. If the fan is spinning faster the actual airflow will be higher than indicated.
Fans run by GenSet <60 hertz.	Static pressure reading is reduced.	Air flow Gauge will read too High. The fan curve on the gauge assumes the fan is operating at 60 Hz. If the fan is spinning slower the actual airflow will be less than indicated.
Restricted bin vents, closed bin lid.	Increased static pressure	Reduced air flow Gauge reading is accurate
Plugged / Collapsed Aeration tube.	Increased static pressure	Reduced air flow Gauge reading is accurate
Undersized Aeration System.	Increased static pressure	Reduced air flow Gauge reading is accurate

Getting an airflow reading when the bin is empty is a great way to evaluate the aeration system design.  
A properly designed system should have less than 1" WC when operating with the bin empty.

**Note: Some manufacturers of full floor aeration do not recommend running your fan with the bin empty. All testing of empty aeration bins must be done with the manufacturers consent.**



Stock Gauge  
\$40



Custom Gauge  
\$55

A stock gauge is one which we ordered in quantity and carry as a stock item.  
As demand grows we expect to add an increasing number of gauges to our stock inventory.

A custom gauge is one which we do not have in stock and manually prepare for our customer based on the manufacturer's fan curve.

All gauges will typically be shipped within 1 day of order.



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